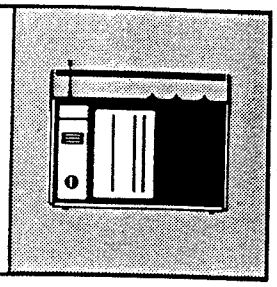
GRUNDIG

Service Manual



3/79

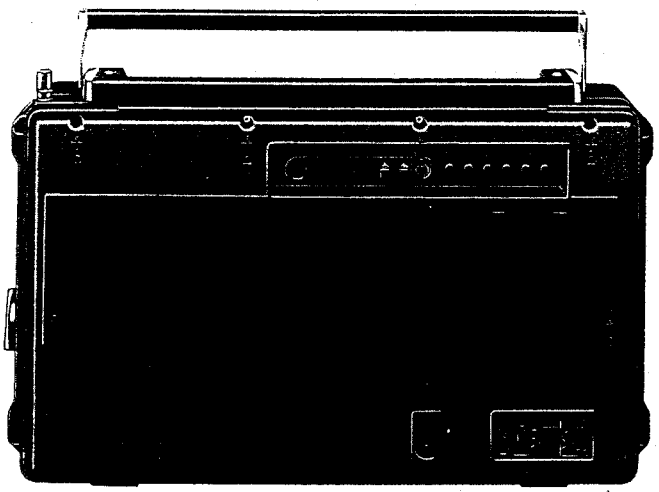
THE QUALITY OF THIS MANUAL IS THE BEST THAT IS AVAILABLE

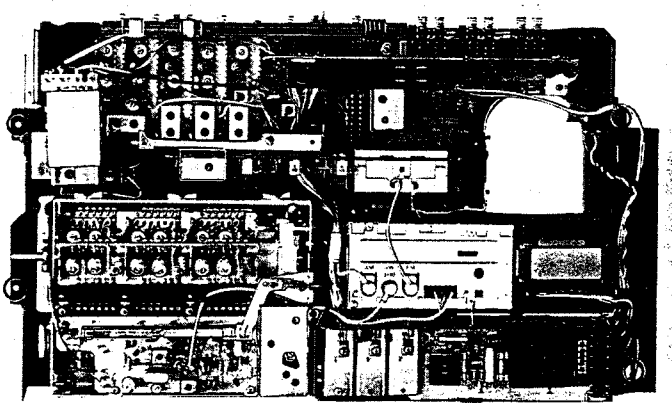
740

Satellit 3400 professional

Removal of Chassis

1. Pull out the mains cable connector and remove any dry or rechargeable batteries which may be in the receiver.
2. Loosen 9 screws (b) and remove back plate (Fig. 1).
3. Pull out the telescopic aerial connector.
4. Unscrew tuner switching knob on the spindle inside the receiver.
5. Unscrew 2 screws in the bottom cover and remove the cover.
6. Pull off 9 rotary and switching knobs.
7. Loosen the 4 screws marked in Fig. 2.
8. Carefully remove chassis and unplug the connector.





Alignment Instructions

All the voltages must be adjusted with the aid of a sufficiently accurate instrument (eg: Grundig DM44) and the given voltages should be kept certainly within the stated tolerances.

I Adjustment of the Operating Points

No signal: V_C = 9V; MW button depressed.

1. With control R 636 (2kΩ), adjust the quiescent current of the output stage T 606 (GD 363), T 607 (GD 364) to 6mA ± 1mA (instead of the bridge, connect milliampmeter to collector of the GD 364). During this adjustment, the loudspeaker connection must be terminated with an impedance of 4Ω and the volume control must be turned fully anti-clockwise.
2. Adjust the emitter current of T 602 with R 607 (100kΩ) so that the voltage drop across R 608 (680Ω) is 1.4V.
3. With the BFO/SSB section switched in circuit, adjust the trimmer resistor R 703 (5kΩ) so that the voltage drop across R 704 (2.7kΩ) is 5V.
4. [illegible]

II Adjusting the Charging Voltage V_C

With a mains supply of 240V AC and the receiver switched off, adjust R 658 (1kΩ) so that the charging voltage V_C into an equivalent resistance of 1kΩ and an elco of 1000μF is 9.1V ± 50mV.

Important: The power supply unit should have been "on" for approx. 2 minutes prior to this adjustment being carried out.

III Frequency Counter

1. With a supply voltage of 9V and the AM reset figure of 99.540 in the counter display (no button depressed) adjust R 876 (5kΩ) to give an output voltage from the converter at test point MP 802 (STV 801 (4)) of 5.15V ± 50mV. (As an alternative, the output voltage may be set outside the receiver with a 39Ω (1W) resistor across the 5V converter).
2. Adjust the trimmer capacitor C 354 so that the reference frequency at test point MP 301 is 320kHz ± 1Hz.

IV AM Alignment

Bandwidth switch to setting "schmal" (= narrow), mod. freq. ≤ 1000Hz.

1. AM-IF

a) AM-IF Alignment 460kHz

Alignment sequence	Wobbulator output connected to	Indicator connection	Alignment
IF-filter XVII	MP 502	Probe loose on collector T502 (MP 503)	(I) For maximum
IF-filter XVII and XVI	MP 501		(II) and (III) for maximum
IF-filter XV and XIII ("K3-10" depressed)	MP 202		(IV) For symmetry (VI) For maximum and symmetry
IF-filter XIV (MW depressed)	MP 401		(V) For maximum and symmetry

b) 2.46MHz-Oscillator

Alignment sequence	Signal generator coupled to	Alignment indication	Alignment
2. Oscillator 2.46MHz	MP 202	Output meter	(VIII) Visually to centre of C 259 (VII) For maximum (VIII) Fine adjustment C 259

c) AM-IF Alignment 2MHz

Alignment sequence	Wobbulator output connected via isolating capacitor to	Indicator connection	Alignment
IF-filter XI	MP 201	to MP 202	At an input of 50mV (X) for min. dip
IF-filter XII			(IX) for maximum
C 214			At 500mV input, the IF curve must be adjusted with(XI) , without raising the base of the curve, for max. steepness

2. AM-Oscillator, Filter and Aerial Circuit Alignment

Range	Frequency Pointer Setting	Oscillator	Filter Circuit	Aerial circuit	Ferrite aerial circuit	Input sensitivity at 30% modulation 400Hz 6db	26db	1 W Narrow	1 W Wide	Image Rejection db	Oscill. voltage At oscillator emitter	At mixer emitter
LW	160 kHz	① Maximum	③ Maximum	⑥ Maximum	⑧ Maximum	6 µV	65 µV	32 µV	24 µV	67	115 ... 100 mV	90 ... 80 mV
	370 kHz 240 kHz	② Maximum	④ Maximum ⑤ Maximum	⑦ Maximum	⑨ Maximum	6,8 µV	75 µV	22 µV	16 µV	67		
MW	560 kHz	⑩ Maximum	⑫ Maximum	⑮ Maximum	⑰ Maximum	3,3 µV	40 µV	16 µV	12 µV	72	65 ... 75 mV	60 ... 70 mV
	1450 kHz 1000 kHz	⑪ Maximum	⑬ Maximum ⑭ Maximum	⑯ Maximum	⑱ Maximum	3,6 µV	44 µV	20 µV	15 µV	64		
K1	1,7 MHz	⑲ Maximum	㉑ Maximum	㉔ Maximum		3,7 µV	45 µV	13 µV	9 µV	70	65 ... 85 mV	60 ... 80 mV
	3,4 MHz 2,5 MHz	⑳ Maximum	㉒ Maximum ㉓ Maximum	㉕ Maximum		1,5 µV	20 µV	10 µV	7 µV	57		
K2	3,4 MHz	㉖ Maximum	㉘ Maximum	㉚ Maximum		2 µV	28 µV	12 µV	8 µV	61	60 ... 80 mV	60 ... 80 mV
	5,0 MHz	㉗ Maximum	㉙ Maximum	㉛ Maximum		1,5 µV	20 µV	11 µV	7 µV	52		

Remarks: The oscillator can be aligned in any sequence; for the filter circuit, first K1, then K2 must be aligned. Note the basic coil positions. The ferrite aerial circuit is aligned in the sequence LW, MW. To tune the LW and MW aerial circuits when an external aerial is used, the signal generator is connected via a 68pF capacitor to the external aerial socket (Y button depressed); to tune the SW aerial circuits (Y button not depressed), the signal generator is connected to the rod aerial connection.

3. SW-Tuner (K3-K10) sliding switch set to "Bereich" (=Range) or "Band" (=Tape)

Range/Band		Alignment Point	Input sensitivity at 30% Modulation 400Hz: 6dB	26dB	1W narrow	wide	Image Rejection db	Osc. voltage At oscillator emitter	At mixer emitter
K3	5,0 - 6,65 MHz	5,2 MHz	0,65 µV	10 µV	1,9 µV	1,3 µV	76	90 ... 110 mV	85 ... 105 mV
		6,5 MHz	0,5 µV	8 µV	1,9 µV	1,3 µV	69		
49 m	5,93 - 6,25 MHz	6,1 MHz	0,5 µV	8 µV	1,8 µV	1,2 µV	70	100 mV	95 mV
K4	6,6 - 8,4 MHz	6,7 MHz	0,55 µV	10 µV	2 µV	1,4 µV	72	100 ... 115 mV	95 ... 110 mV
		8,3 MHz	0,5 µV	8 µV	2 µV	1,5 µV	66		
41 m	7,0 - 7,31 MHz	7,2 MHz	0,5 µV	8 µV	1,9 µV	1,3 µV	69	105 mV	100 mV
K5	8,2 - 10,55 MHz	8,3 MHz	0,5 µV	8 µV	1,7 µV	1,2 µV	70	90 ... 105 mV	85 ... 100 mV
		10,2 MHz	0,45 µV	7 µV	1,7 µV	1,2 µV	63		
31 m	9,45 - 9,85 MHz	9,7 MHz	0,45 µV	7 µV	1,6 µV	1,1 µV	64	95 mV	90 mV
K6	10,5 - 13,2 MHz	10,8 MHz	0,45 µV	7 µV	1,6 µV	1,1 µV	65	110 ... 125 mV	105 ... 115 mV
		13,0 MHz	0,4 µV	6,5 µV	1,7 µV	1,2 µV	59		
25 m	11,65 - 12,05 MHz	11,8 MHz	0,4 µV	6,5 µV	1,5 µV	1 µV	62	115 mV	105 mV
K7	12,9 - 16,3 MHz	13,0 MHz	0,4 µV	7 µV	1,7 µV	1,2 µV	63	95 ... 105 mV	90 ... 100 mV
		16,0 MHz	0,35 µV	6 µV	1,8 µV	1,3 µV	54		
19 m	15,05 - 15,65 MHz	15,3 MHz	0,35 µV	6 µV	1,7 µV	1,2 µV	57	100 mV	90 mV
K8	15,8 - 19,8 MHz	16,0 MHz	0,35 µV	6 µV	1,5 µV	1 µV	57	80 .. 90 mV	75 ... 85 mV
		19,5 MHz	0,35 µV	6 µV	1,7 µV	1,2 µV	47		
16 m	17,45 - 18,05 MHz	17,8 MHz	0,35 µV	6 µV	1,5 µV	1 µV	52	80 mV	75 mV
K9	18,35 - 23,5 MHz	18,7 MHz	0,4 µV	6,5 µV	1,7 µV	1,2 µV	54	85 ... 95 mV	75 ... 85 mV
		23,0 MHz	0,4 µV	7 µV	2,2 µV	1,6 µV	44		
13 m	20,95 - 21,85 MHz	21,6 MHz	0,4 µV	6,5 µV	1,9 µV	1,3 µV	46	85 mV	75 mV
K10	23,4 - 30 MHz	24,0 MHz	0,4 µV	7 µV	2,2 µV	1,6 µV	50	100 ... 110 mV	75 ... 80 mV
		29,5 MHz	0,4 µV	7 µV	2,8 µV	2 µV	38		
11 m	25,5 - 26,4 MHz	25,8 MHz	0,4 µV	7 µV	2,2 µV	1,6 µV	45	100 mV	75 mV

Remarks: The tuner must be aligned very carefully. As the screening cover and the tuner scale affect the tuning, this should be borne in mind when the circuit is being aligned. Alignment may be carried out in any sequence, except that the band must not be aligned until the range alignment has been completed.
For the aerial circuit alignment, the signal generator is connected via 20pF to the base of the telescopic aerial.
Oscillating voltage at the second oscillator: Oscillator emitter 60mV
Mixer emitter 55mV

4. Adjustment of Field Strength Meter on AM

With the AM-alignment completed, adjust the reading on the meter at f = 1.7MHz (K 1) and an input of 30µV to "1", using R 519 (25kΩ) and at an input of 100mV to "9" using R 514 (500kΩ). This adjustment should be repeated at least once.

5. Alignment of the SSB Section

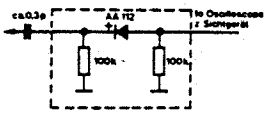
Oscillator Alignment

Set the BFO/SSB switch to "Aus" (=off). In the K3-10 mode, eg: in the 49 metre band at 6.1MHz, and with a modulation frequency of about 400MHz, adjust the receiver very accurately for maximum reading either on the output meter at low level or on the field-strength meter at higher level.

Set trimmer C 711 ㊱ visually to mid-position.
Set BFO/SSB switch to "Ein" (=on). With the trimmer C 709 ㊳ not connected in circuit (USB/LSB switch to the left) and the core of the SSB coil 19415-010.00 ㊲ turned to the right-hand stop, adjust filter 07220-510.00 ㉟ with unmodulated signal to zero beat. After locking the core, adjust accurately with C 711 ㊱ . Switch trimmer C 709 (3 15 pF) ㊳ into circuit (USL/LSB switch), turn fine tuning to left-hand stop and adjust for zero beat again with C 709 ㊳ The frequency deviation of the SSB section is now approx. ± 1kHz. Because of the ceramic oscillator and the ceramic filter, the SSB section may be aligned only when fitted in the complete chassis.
The oscillating voltage at the emitter of transistor T 703 is approx. 65 mV.

V. FM Alignment ("Fm" depressed, "AFC" off)

1. FM IF Alignment 10.7MHz

Alignment Sequence	Wobbulator output connected to	Oscilloscope connected to	Alignment
IF-filter IX	MP 304	Via clip-on probe with built-in diode (see Fig.) to MP 305 (near collector T 308)	(b) Detune (a) for maximum
IF-filter VIII and VII	MP 303		(c) and (d) for maximum
IF-filter VI and V	MP 302		(e) and (f) for maximum
IF-filter IV and III	MP 301		(g) and (h) for maximum
IF-filter II and I	FM-counter connecting cable		(i) and (k) for maximum
IF-filter X	MP 304	to MP 306	At approx. 10mV on the base of T308 and very small deviation, the secondary circuit (b) is adjusted for optimum symmetry and straight curve and the primary circuit (a) is corrected for maximum steepness. The moment at which the transformer curve passes through zero must coincide with maximum reading on the instrument.
AM-suppression			The AM suppression is adjusted with control R 381 (2.5kΩ)

2. FM-RF Alignment

a) Adjustment of the tuning voltages:

At slider S of the tuning resistor 19703-036.00, with the FM button depressed and with the FM pointer at the r.h. end of the scale, adjust the voltage with R 341 (10kΩ) in the 30V converter to 30V± 100mV and with the FM pointer at the l.h. end of the scale, with R473 (15kΩ) to 2.1V ± 10mV.

b) FM Oscillator, filter and aerial circuit alignment

Generator freq. pointer setting	Oscillator	Filter circ.	Aerial circ.	Input sensitivity 15 kHz dev 1000 Hz 6dB	26dB	1W	Image Rejection	Oscill. voltage At oscillator emitter	At mixer emitter
88 MHz	(A) Maximum	(C) Maximum	(E) Maximum	0,50 µV	1,5 µV	1,1 µV	55 dB	80 ... 90 mV	45 ... 55 mV
106 MHz	(B) Maximum	(D) Maximum	(F) Maximum	0,55 µV	1,6 µV	1 µV	53 dB		

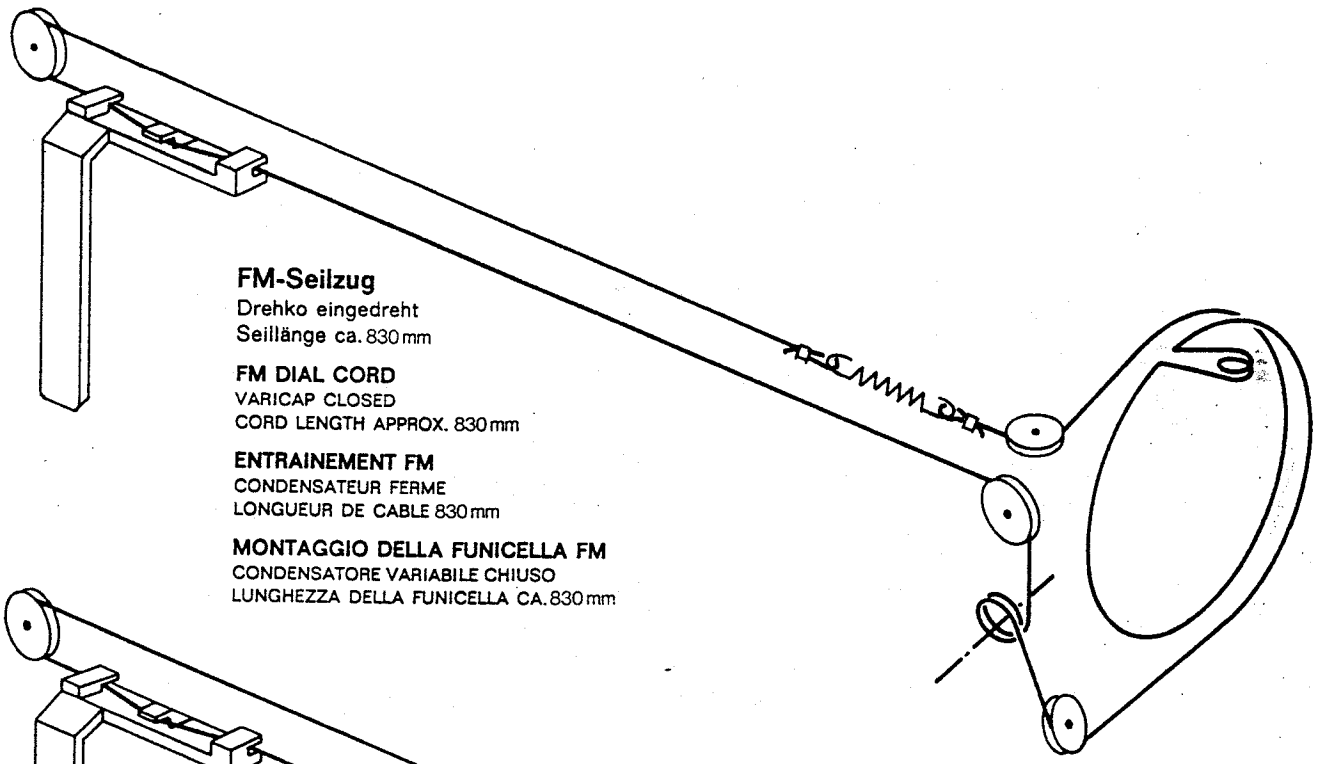
Note: Connect the signal generator straight to the connection for the telescopic aerial.

c) Adjustment of the field-strength meter in the case of FM

When the FM alignment has been completed, adjust the deflection of field-strength meter to "1" by means of R 356 (50kΩ) at 88MHz and an input voltage of 3µV, and to "9" by means of R 361 (50kΩ) at a signal of ≥ 1mV.

The control F 652 is located either in the AF section (19310-469.00) or in the coil assembly 19415-007.00.

NOTES:

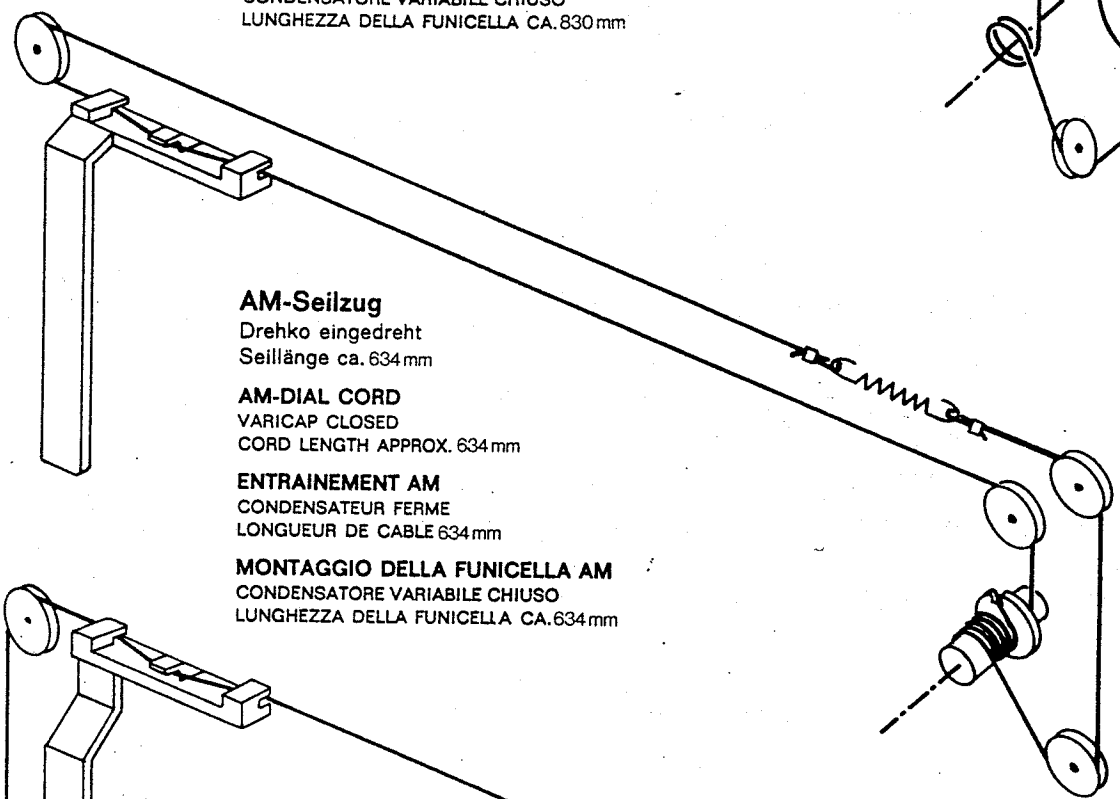


FM-Seilzug
Drehko eingedreht
Seillänge ca. 830 mm

FM DIAL CORD
VARICAP CLOSED
CORD LENGTH APPROX. 830 mm

ENTRAINEMENT FM
CONDENSATEUR FERME
LONGUEUR DE CABLE 830 mm

MONTAGGIO DELLA FUNICELLA FM
CONDENSATORE VARIABILE CHIUSO
LUNGHEZZA DELLA FUNICELLA CA. 830 mm

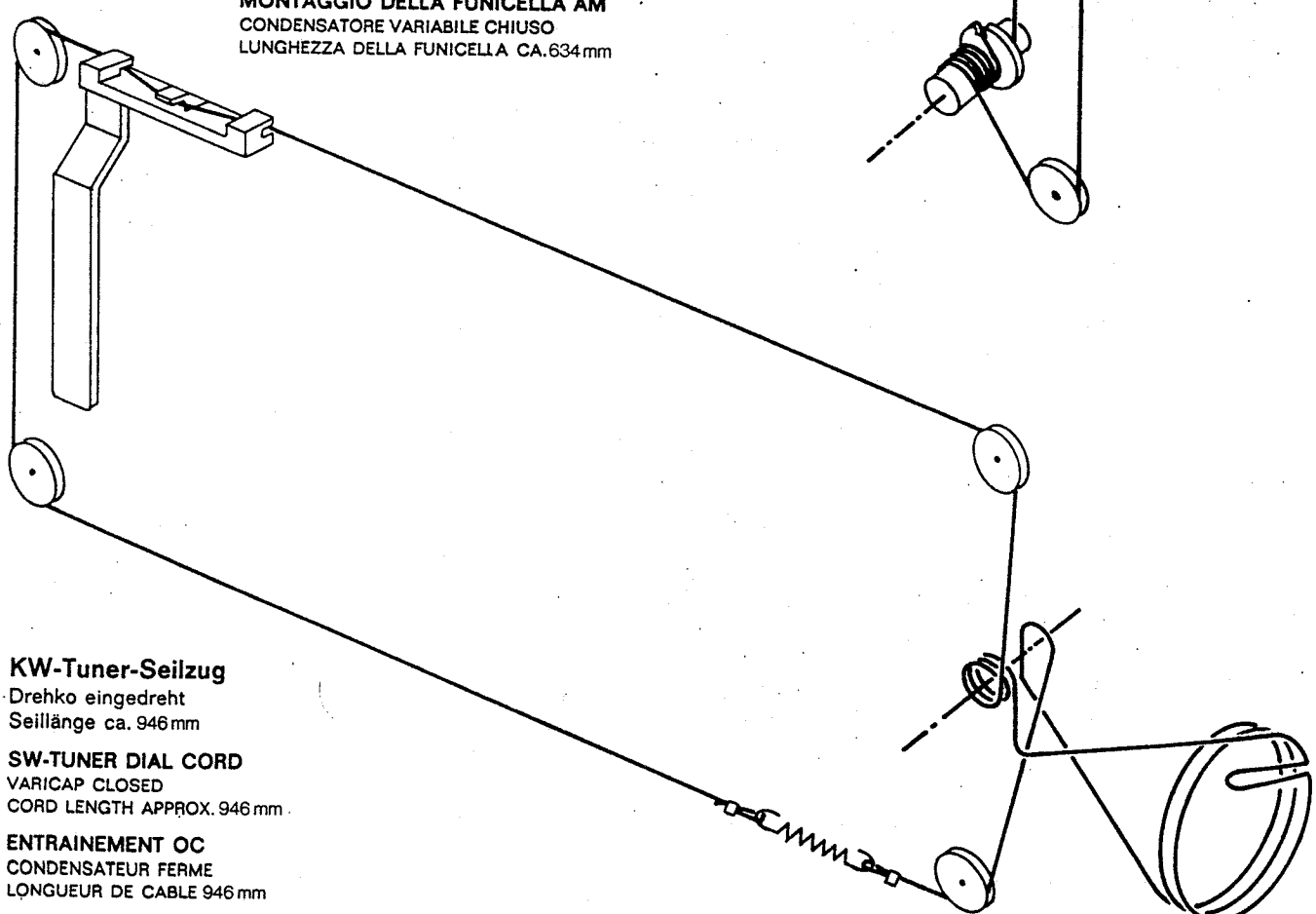


AM-Seilzug
Drehko eingedreht
Seillänge ca. 634 mm

AM-DIAL CORD
VARICAP CLOSED
CORD LENGTH APPROX. 634 mm

ENTRAINEMENT AM
CONDENSATEUR FERME
LONGUEUR DE CABLE 634 mm

MONTAGGIO DELLA FUNICELLA AM
CONDENSATORE VARIABILE CHIUSO
LUNGHEZZA DELLA FUNICELLA CA. 634 mm



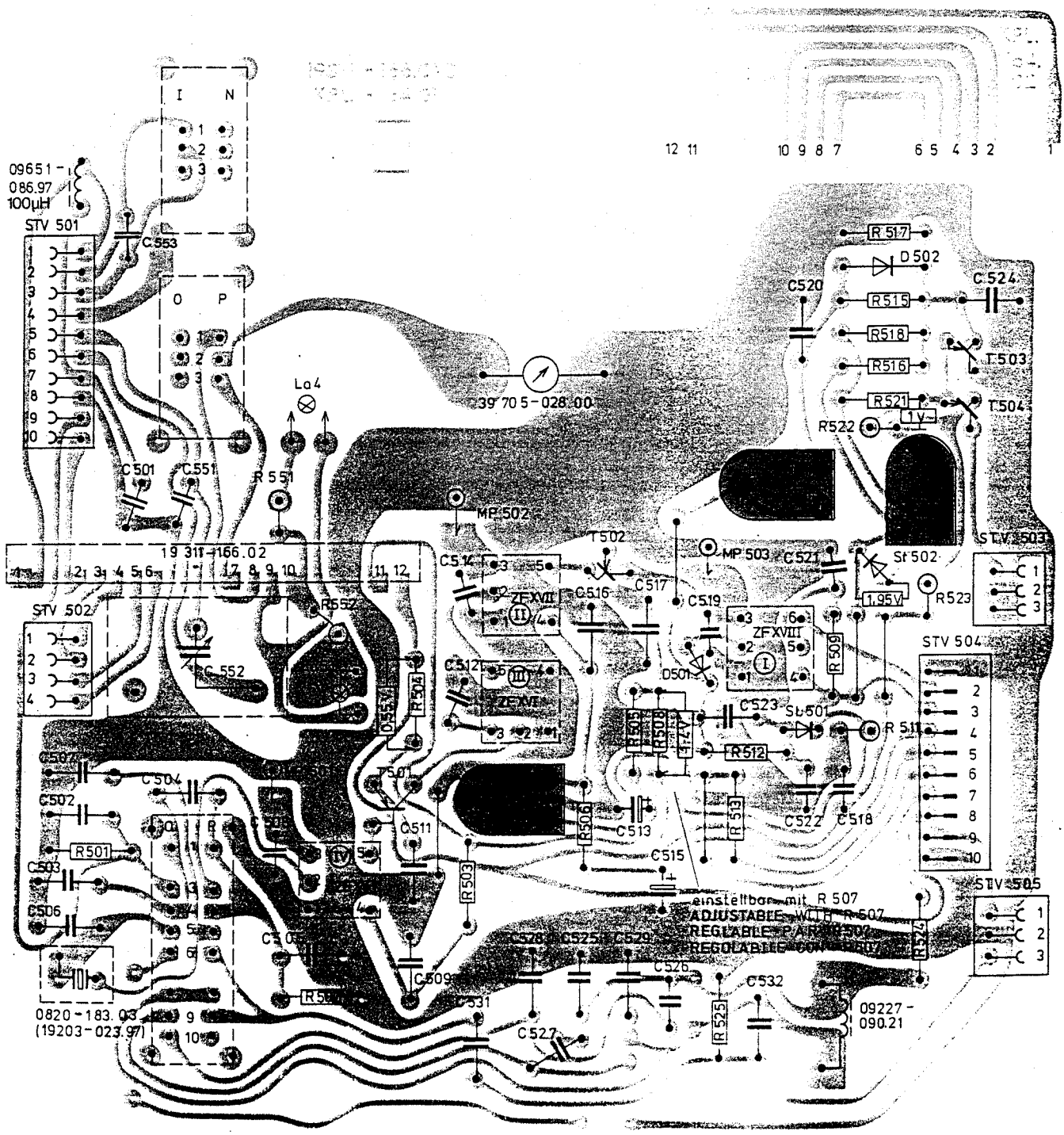
KW-Tuner-Seilzug
Drehko eingedreht
Seillänge ca. 946 mm

SW-TUNER DIAL CORD
VARICAP CLOSED
CORD LENGTH APPROX. 946 mm

ENTRAINEMENT OC
CONDENSATEUR FERME
LONGUEUR DE CABLE 946 mm

MONTAGGIO DELLA FUNICELLA OC
CONDENSATORE VARIABILE CHIUSO
LUNGHEZZA DELLA FUNICELLA CA. 946 mm

19311-206.00
AM-ZF-Platte, Lötseite
AM-IF BOARD, SOLDER SIDE
PLAQUE AM-FI, COTE SOUDURES
PIASTRA AM-FI, LATO SALDATURE



Pos. No.	Fig. No.	Part No.		Description
				Cabinet, black (SL)
1		15038-007.01		Cabinet front compl.
1.1		15038-051.01		Decorative fabric com.
1.11	1	09663-902.01		GRUNDIG Emblem
1.2	1	15038-177.01		Scale cover compl.
1.3	1	15038-179.01		Scale cover compl.
1.4	1	15038-181.01		Scale cover compl.
1.5	1	15035-183.01		Indicator cover
				Cabinet, black
1		15038-008.01		Cabinet front compl.
1.1		15038-014.01		Ornamental plate compl.
1.11	1	09663-902.01		GRUNDIG Emblem
1.2	1	15038-177.01		Scale cover compl.
1.3	1	15038-179.01		Scale cover compl.
1.4	1	15038-181.01		Scale cover compl.
1.5	1	15035-183.01		Indicator cover
				from Pos. 2, both versions are identical:
2		29608-226.01	4x	Washer
3	1	15035-032.01		Handle recess
4	1	15035-033.01		Cap R.H.
5	1	15035-034.01		Cap L.H.
6		01475-142.00	2x	Handle brake
7		09619-625.00	2x	Coil spring
8	1	09661-266.01		Handle
9	1	15038-028.01	6x	Pushbutton
10	1	15038-030.01	8x	Pushbutton
11		15038-026.01		Cabinet back
12		15035-036.01		Cable comp. lid
13		15038-037.01		Battery compart. cover
14		15035-038.01		Contact bridge
15	1	15038-035.01		Switch lever compl.
16	1	15035-228.01	5x	Switch lever compl.
17	1	15038-036.01	2x	Switch lever compl.
18	1	15035-228.02		Switch lever compl.
19	1	09670-906.01		Wave change knob
20		09603-566.00		Clamping ring
21	1	09670-855.02	3x	Control knob
22	1	09670-856.05	5x	Control knob
23	1	09670-856.06		Control knob
24	1	15038-039.01		Preset cap. knob
25		09619-767.00	9x	Coil spring
26	1	09661-332.01	2x	Bracket
27	1	09661-342.01	4x	Ornamental ring
28		15038-083.01		Scale compl. (49 M)
29		15038-085.01		Scale compl. (41 M)
30		15038-087.01		Scale compl. (31 M)
31		15038-089.01		Scale compl. (25 M)
32		15038-091.01		Scale compl. (19 M)
33		15038-093.01		Scale compl. (16 M)
34		15038-095.01		Scale compl. (13 M)
35		15038-097.01		Scale compl. (11 M)
36	2	15038-075.01		Scale compl. (AM)
37	2	15038-077.01		Scale compl. (FM)
38		15035-101.00		Mask
39		15035-102.00		Mask
40		15015-162.00	8x	Scale retainer
41	2	15035-103.00		Cover disc
				Chassis
51		09618-083.02	4x	Contact spring
52		09618-103.00	2x	Contact spring
53		05113-223.00		Contact spring
54	2	09612-309.02	6x	Drive pulley
55	2	09612-316.00	2x	Drive pulley
56		09604-658.00	6x	Washer
57		09666-360.00		Bearing bush
58		09631-314.00	3x	Rubber grommet
59		09630-697.00	3x	Spacer
60	2	15035-042.00		Spindle compl.
61	2	19703-036.00		Tuning resistor
62	2	8138-007-021	2x	Drive cord TE 50 P (black)
63	2	09619-113.00	2x	Tension spring
64	2	15035-070.02		Pointer compl. (FM)
65	2	15035-049.00		Drive drum
66		09619-767.00		Coil spring
67	2	15035-067.02		Pointer compl. (AM)
68	2	15035-073.02		Pointer compl. (SW)
69		39601-682.00	2x	Connector
70		39601-683.00		Connector
71		39601-689.00		Connector
72	3	09004-002.01		Mains transformer
73	3	15035-112.00	2x	Shim
74	3	15009-021.00	2x	Transformer clamp
75	1	15038-043.01		Lever compl.
76	2	8138-003-005	2x	Polyamide cord 0.3 Ø
77	3	19076-001.01		Loudspeaker
78	1	09621-119.02		Earphone socket w. nut
80	1/3	15015-080.01		Telescopic aerial compl.
81		8132-015-139		Flat plug-in sleeve
82		09690-352.97		Mains lead w. plug and centre connector
82		09690-376.97		Mains lead w. plug and centre connector (for GB)
83		8316-453-002	3x	Pilot bulb 7V/80mA/2307
84	3	15035-047.00	2x	Ferrite aerial rod clamp
86		19426-032.00		Ferrite aerial compl.
86.1	3	09648-901.97		Aerial rod
86.2	3	09234-302.02		MW-ferrite aerial coil
86.3	3	09234-301.02		MW-ferrite aerial coil
86.4	3	09234-442.02		LW-ferrite aerial coil
86.5		09666-384.97		Wire clamp
				Tuning coil set 19415-008.00
101		19416-002.00		Mounting plate compl.
102		07422-940.00		Slider
103		09619-763.00		Spring
104		09216-943.01		SW-RF tuning coil set
105		09216-941.01		LW-RF tuning coil set
106		09216-942.01		MW-RF tuning coil set
107		09647-623.97	3x	Ferrite tuning slug
108		09647-036.25	3x	Tuning coil compl.
109		09647-803.97	3x	Ferrite sleeve
110		19701-027.08		Tuning capacitor compl.
110.1		09666-634.00		Pinion
				FM Unit
120	4	19420-010.00		FM unit compl.
122	4	09226-125.01		FM-RF coil pack
123	4	09226-193.01		FM-filter circuit coil
124	4	09226-234.01		FM-oscillator coil pack
125		09647-681.97	2x	FM-tuning slug
126		09647-663.97		Tuning slug
127	4	07202-001.97	2x	IF filter ZF 1/111
128	4	07202-067.97		IF filter ZF 11
129	4	07202-066.97	2x	IF filter ZF IV/VI
130	4	07202-065.97	2x	IF filter ZF V/VII
131	4	07202-016.97		IF filter ZF VIII
132	4	07202-044.97		IF filter ZF IX
133	4	07202-045.97		IF filter ZF X
134	4	8140-525-007		Choke
135	4	09239-029.01		VHF choke (wound on R 311)

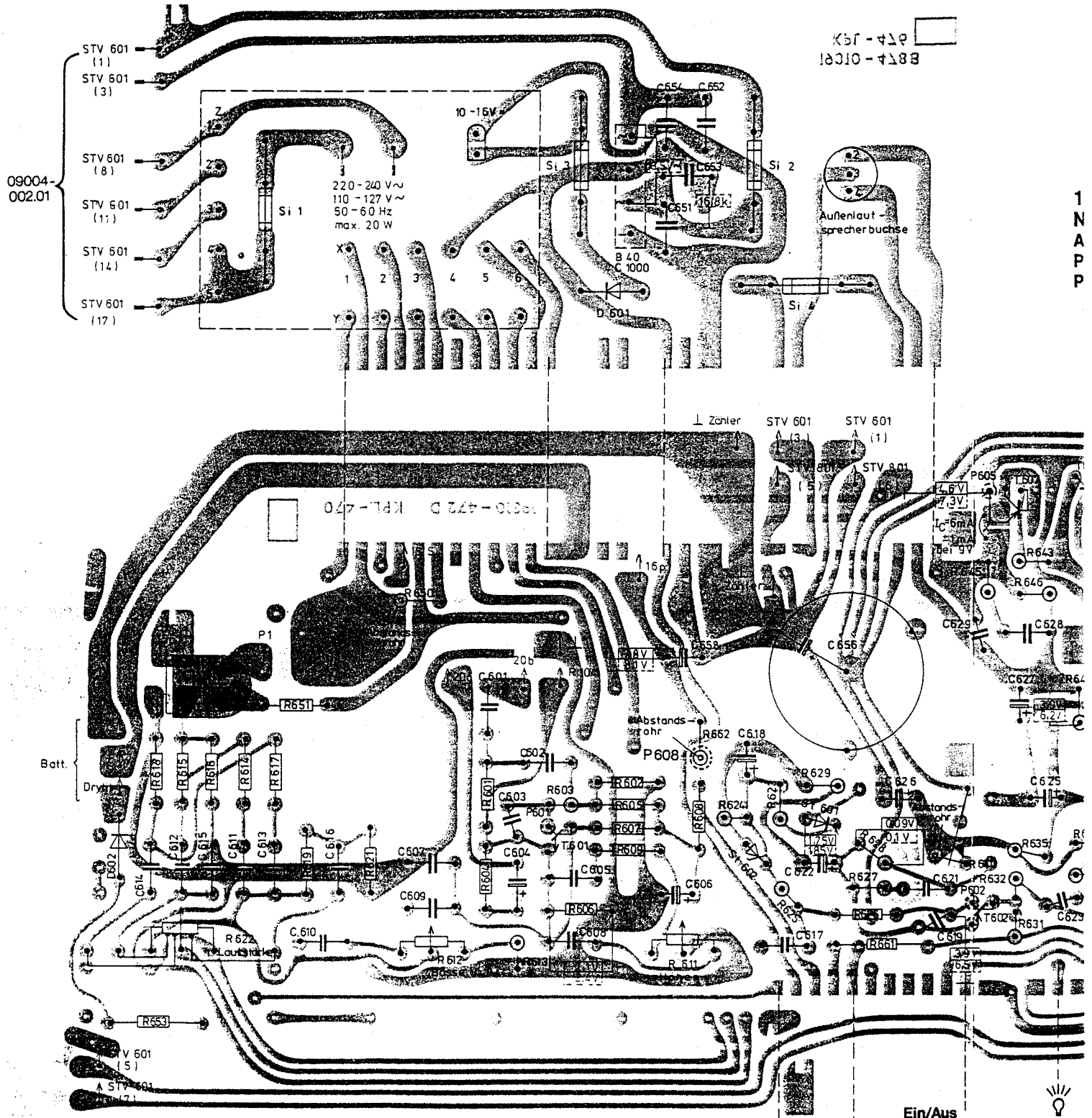
Pos. No.	Fig. No.	Part No.		Description
				FM Unit contd.
136		09218-191.97		Ferrite choke
137		09647-020.97	2x	Ferrite bead
138		09647-022.97		Ferrite bead
139		09622-469.00		Coaxial plug
140		09622-470.00		Screen cap
141		07248-336.00		Sleeve
142		8302-222-901		(T301)
143		8302-220-441		(T302. . .308)
144		8302-200-233		(T309)
145		8302-200-231		(T310)
146		8309-510-197		(D301/302)
147		8309-510-198		(D303)
148		8309-201-018		(D304)
149		8309-001-002		(D305. . .308)
150		8309-701-102		(St.301/302)
151		8309-215-050		(D309)
152	4	19799-311.91		(C318) trimmer cap.
153	4	19799-313.91		(C302) trimmer cap.
154	4	19799-314.91		(C306) trimmer cap.
155	4	8790-294-042		(R381– preset pot.
156	4	8790-209-008		(R356/361) preset pot.
				Coil set
				(19415-007.00)
160	3	19400-041.03		Push button unit
161	3	19400-043.03		Touch button
162	3	19400-044.03		Touch button
163	3	19400-050.03		Touch button
165		39600-210.00		Female connector compl.
166		39600-204.00		Female connector compl.
167		39600-203.00	2x	Female connector compl.
168		39600-109.00		Female connector compl.
178		09223-406.21		LW-coupling coil pack
179		09223-407.21		LW-RF coil pack
180		09223-409.21		MW-RF coil pack
181		09647-648.97		Ferrite tuning slug
				(for No. 178)
181a		09647-649.97		Ferrite tuning slug
				(f. No. 179/180)
182	5	09223-408.21		MW-coupling coil pack
183	5	09223-516.21		SW1-RF coil pack
184	5	09223-517.21		SW2-RF coil pack
185	5	09223-678.21		LW-oscillator coil
186	5	09223-679.21		MW-oscillator coil
187	5	09223-479.21		SW1-oscillator coil pack
188		09647-684.97		Tuning slug
				(f. No. 183-187)
189	5	19202-323.97		SW2-filter circuit coil
190		8140-525-018		Choke
191	5	09223-480.21		SW2-oscillator coil
191.1		09647-663.97		Tuning slug
192	5	19202-314.97		IF transformer
193		09647-020.97		Ferrite bead
194		09622-469.00		Coaxial plug
195		09622-470.00		Screen cap
196		07248-336.00		Sleeve
197		15035-045.00	2x	Board carrier
199		8302-200-041		(T401/404)
200		8302-222-040		(T402/403)
201		8309-214-114		(D401/402)
202		8309-701-081		(St.401)
203	5	19799-323.91		(C444) Trimmer cap.
204	5	19799-324.91	4x	Trimmer cap.
205	5	19799-325.91	5x	Trimmer cap.
206	5	19799-326.91	4x	Trimmer cap.
207	5	8790-009-047		(R472) Preset pot
208	5	8790-009-152		(R473) Preset pot
209	5	8790-009-025		(R652) Preset pot
211	5	19310-528.00		Transducer compl. 30V
211.1		8140-525-118		Ferrite choke
211.2		8309-215-050		(D311)
211.3		8305-302-720		(IC301) Integr. circuit
211.4		8790-209-005		(R341) Preset pot
213		19311-153.00		Socket board compl.
213.1	3	09626-144.00		Female connector
213.2	3	19703-024.01		Tuning control
213.3		09238-650.97		RF-transformer
213.4		09238-171.00		RF-choke
219.5		8316-216-001		Neon bulb 76 120
				SW Tuner
229	3	19415-009.00		SW tuner compl.
230		15035-144.00		Coil drum
231		15035-148.00		Locating piece
232		15035-272.00		Bearing bush
233		09603-585.00		Clamping ring
234		15035-140.00	2x	Roller
235		15035-149.00	2x	Rest Lever
236		09619-119.00		Tension spring
237		09603-701.00	4x	Drive pulley spindle
238		15035-105.00		Spring
239		15035-147.00		Bearing
240		15035-133.00		Drive spindle
241	2	8138-003-005		Cord 0.3 Ø
241a		15035-270.00		Spring
242		09631-314.00	3x	Rubber grommet
243		19701-026.97		Tuning capacitor
244		15035-142.00		Rejector
245		15035-050.00		Drive wheel
246		09603-566.00		Clamping ring
247	2	09612-309.02	4x	Drive pulley
248		09604-658.00	4x	Washer
249	2	8138-007-021		Drive cord TE50 P
				(black) 0.5 Ø
250	2	09619-113.00		Tension spring
252		15015-154.00		Lever
253		15015-143.00		Lever spring
255		09622-079.00		Socket compl.
258	6	19311-168.00		Tuner board compl.
258.1		15015-132.00	18x	Spring
258.2		19706-031.00		Slider switch
258.3	6	19202-340.97		IF filter ZF XI
258.4	6	19202-341.97		IF filter ZF XII
258.5	6	19202-314.97		IF filter ZF XIII
258.6		8382-241-097		Quartz-filter
258.8	6	8140-525-018		Choke
258.9	6	09202-235.21		SW-oscillator coil
258.91	6	09647-616.97		Tuning slug
258.10	6	09218-025.01		HF-choke
258.12		09647-022.95	2x	Ferrite bead
258.13		09647-022.97		Ferrite bead
258.14		09647-020.97		Ferrite bead
258.16		09622-469.00		Coaxial plug
258.17		09622-470-00		Screen cap
258.18		07248-336.00		Sleeve
258.20		8302-200-041		(T201/202/205)
258.21		8302-200-233		(T203)
258.22		8302-222-040		(T204/206/207)
258.24		8309-214-114		(D201/202)
258.25		8309-701-081		(St.201)
258.26	6	19799-321.91		(C259) Trimmer cap.
258.27	6	19799-301.13		(C214) Trimmer cap
260		19415-121.00		Coil set SW 3/49m
261		19415-122.00		Coil set SW 4/41m
262		19415-123.00		Coil set SW 5/31m
263		19415-124.00		Coil set SW 6/25m
264		19415-125.00		Coil set SW 7/19m
265		19415-126.00		Coil set SW 8/16m
266		19415-127.00		Coil set SW 9/13m
267		19415-128.00		Coil set SW10/11m
				AM-IF Board
275	7	19311-163.00		AM-IF board compl.
276		19706-019.00		Toggle switch (tuning/batt.)
277		19706-020.00		Toggle switch (AFC)
278		19706-021.00		Toggle switch (Bandwidth)
279	2	15035-125.00		Trimmer bearing
281	2	39601-670.01		Pin contact – lower part
				(flat)

Pos. No.	Fig. No.	Part No.		Description
				FM Unit contd.
282		39600-203.00		Female connector compl.
283		39600-204.00		Female connector compl.
284		39600-210.00		Female connector compl.
289	2	39705-028.00		Meter
290		09622-079.00		Socket compl.
291	7	19202-316.97		IF filter ZF XV
292	7	19202-317.97		IF filter ZF XVI
293	7	19202-318.97		IF filter ZF XVII
294	7	19202-336.97		IF filter ZF XVIII
294a		8602-099-001		Ceramic oscillator
295	7	09227-090.21		AF choke
296	7	8140-525-132		Ferrite choke
297		8316-113-102	2x	Pilot bulb
298		8302-200-041		(T501)
299		8302-222-040		(T502)
300		8302-200-220		(T503/504)
301		8309-002-002		(D501)
302		8309-207-008		(D502)
303		8309-701-102		(St.501/502)
304	7	19701-028.00		(C552) Trimmer cap 100pF
305	7	8790-009-021		(R519) Preset pot
306	7	8790-009-027		(R514) Preset pot
307	7	8790-009-024		(R507) Preset pot
				SSB Board
310	8	19311-174.00		SSB board compl.
311	8	19706-020.00	2x	Toggle switch
312	2	19703-038.97		Rotary switch
314	8	09227-974.21		AF choke
315		09647-020.97	2x	Ferrite bead
316		07220-510.00		IF oscillator coil
317		8302-200-041		(T701/702)
318		8302-222-040		(T703)
319		8302-202-543		(T704)
320		8302-200-233		(T705)
321		8302-200-230		(T706)
322		8309-001-106		(D701/702)
323		8309-215-050		(D703/704)
324	8	19799-323.04		(C709) Trimmer cap.
325	8	8790-009-017		(R703) Preset pot
326	2/8	19703-037.97		(R716) Potentiometer
327	8	19799-321.91		(C711) Trimmer cap.
				Tuning coil set
335	2	19415-010.00		Tuning coil set compl.
335.1		15035-172.00		Tuning coil set-housing
335.2		09216-194.01		Oscillator coil (fine adjustment)
335.3		15035-173.00		Spindle
335.4		09647-049.97		Tuning coil core
335.5		15035-174.00		Toothed rack
335.6		09619-763.00		Spring
				AF-unit (19310-469.00)
350		15035-116.00		Spacer
351		09647-020.97	4x	Ferrite bead
352		09647-022.97	3x	Ferrite bead
353		09647-021.97		Ferrite bead
355		50002-052.00		Fuse spring
356		8302-200-551		(T601)
357		8302-200-309		(T602)
358		8302-202-538		(T603)
359		8302-200-427		(T604)
360		8302-400-108		(T605)
361		8302-202-127		(T609)
362		8302-410-363		(T606)
363		8302-410-364		(T607)
364		8302-210-018		(T608)
365		8302-210-132		(T610)
366		8309-701-102		(St.601)
367		8309-001-017		(St.603)
368		8309-650-003		(St.604/605)
369		8309-707-110		(St.602)
370		8309-215-021		(D602)
371		8309-215-050		(D603)
372	9	8446-797-109		(C656) Elco
373	9	8410-810-005		(C658) Elco
374	9	8410-820-020		(C627) Elco
375	9	8713-065-035		(R653) Metallised resistor
376	9	8713-080-057		(R639) Metallised resistor
377	9	8700-229-053		(R658) Resistor
379	9	8790-290-038		(R636) Preset pot
380	2/9	19703-029.97		(R622) Potentiometer (volume)
381	2/9	19703-030.97		(R612) Potentiometer (Bass)
382	2/9	19703-031.97		(R611) Potentiometer (Treble)
				PCB with Switches
390		19310-480.00		PCB with switches compl.
391		19706-019.00		Tip switch (bulb)
392		19706-020.00		Tip switch (loudspeaker)
393		19706-025.00		Tip switch (counter)
394		19706-026.00		Tip switch (mains)
				Power supply unit PCB
400	3	19310-474.00		P.S.U. board compl.
401	3	15035-164.00		Voltage selector compl.
402	3	09623-084.00		Speaker socket
403		09621-113.02	6x	Fuse holder
404	3	39601-872.01		Pin contact-lower section
				Rectifier
408		8309-215-021		(D601)
				Frequency-counter (15035-200.00)
				Amplifier Board
419	10	19311-129.00		Amplifier board compl.
420	10	15035-155.00		Coaxial socket 3-fold
421	10	39601-667.01		Pin contact-lower section (flat)
422	10	8140-525-024		Choke
423		8302-220-414		(T802)
424		8302-220-034		(T801/803)
425		8302-202-558		(T806)
426		8302-202-538		(T804/807)
427		8302-200-559		(T805)
429		8309-215-050		(D801)
430	10	8305-190-112		(IC801) Integr. circuit
431	10	8305-199-093		(IC802/803) Integr. circuit
432	10	8305-200-598		(IC807) Integr. circuit
434	10	8309-505-044		(Th. 801. . .805)
				Indicator Board
440		19311-134.00		Indicator board compl.
441	2	8309-909-941	5x	LED display HA 1141 R
				Parts for 5V converter
445	11	19311-196.00		5V converter compl.
447	11	09227-050.21		Converter coil
448	11	09238-191.01	2x	Choke
448.1		09647-009.97		Ferrite rod core
449		8302-202-538		(T808)
450		8302-200-233		(T809)
451		8302-210-136		(T810)
452		8309-701-081		(St.801)
453		8309-715-008		(St.802)
454		8309-703-016		(D803)
455		8309-204-050		(D802)
456	11	8305-301-761		(IC808) Integr. circuit
457	11	8790-209-048		(R876) Preset pot
				MOS-IC-Board
470		19311-179.00		IC board compl.
471		8305-307-578		(IC 806) Integr. circuit

Pos. No.	Fig. No.	Part No.	Description
			Oscillator board
480		19311-139.00	Oscillator board compl.
482		8382-241-197	Crystal 5.12MHz
483		8305-199-093	(IC805) Integr. circuit
484		8305-199-000	(IC804) Integr. circuit
485		19799-336.94	(C854) Trimmer cap.
			Quartz clock (15038-250.51)
491	1	15038-101.01	Clock housing compl.
491.1	1	15038-106.00	Window
492		15035-267.00	Contact bridge
493		15038-112.00	Lid
494		15038-114.00	Contact
495		15038-115.00	Contact
497		15038-251.51	Clock module compl.
497.1	1	15038-122.01	2x Button

NOTES:

19310-474.00
Netzteil-Platte, Bestückungsseite
POWER-SUPPLY BOARD, COMPONENT SIDE
PLAQUE D'ALIMENTATION, COTE COMPOSANTS
PIASTRA DI ALIMENTAZIONE, LATO COMPONENTI



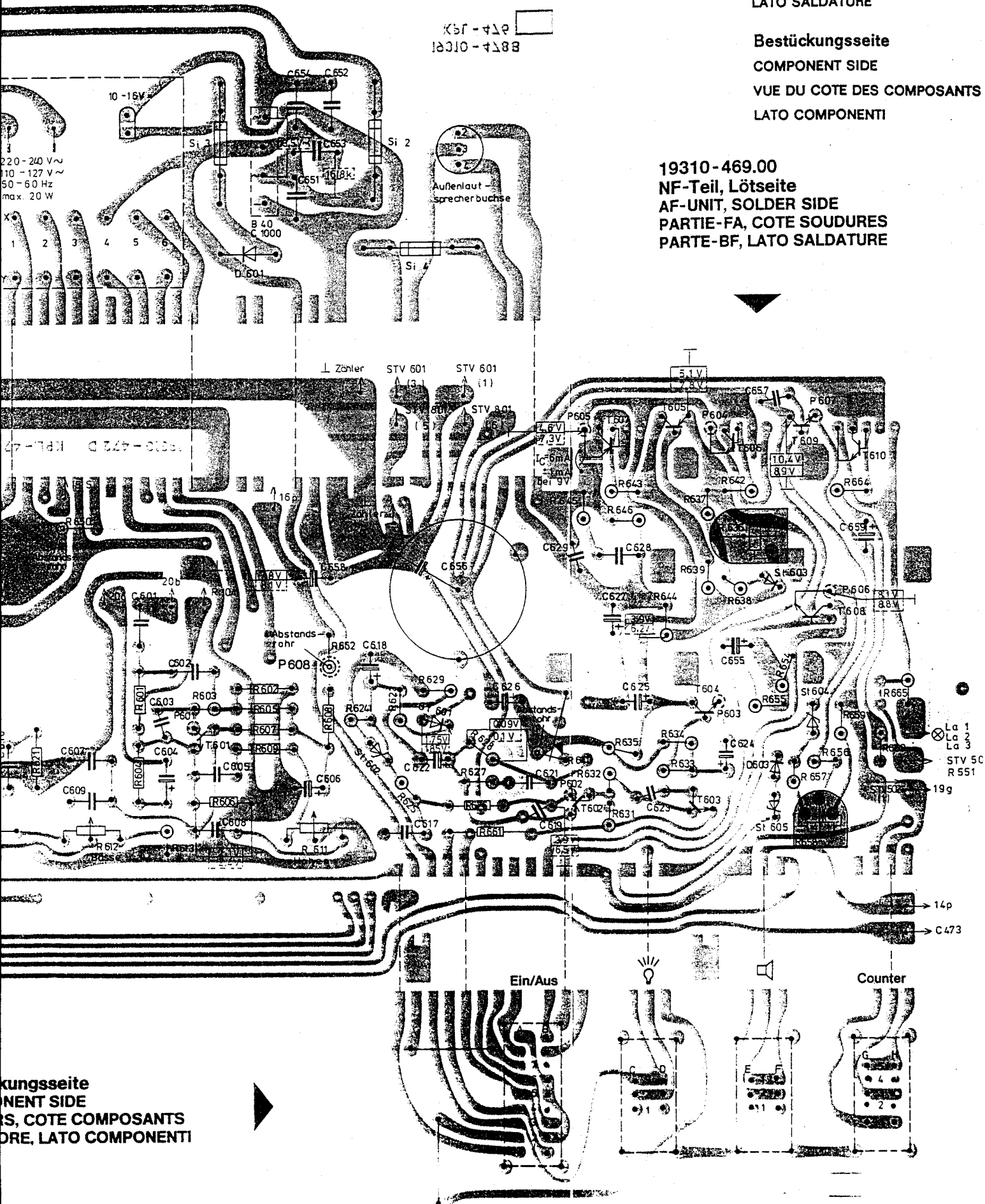
19310-480.00
Schalterplatte, Bestückungsseite
SWITCH BOARD, COMPONENT SIDE
PLAQUE COMMUTATEURS, COTE COMPOSANTS
PIASTRA DI COMMUTATORE, LATO COMPONENTI

kungsseite
COMPONENT SIDE
N, COTE COMPOSANTS
NE, LATO COMPONENTI

Lötseite
SOLDER SIDE
COTE DES SOUDURES
LATO SALDATURE

Bestückungsseite
COMPONENT SIDE
VUE DU COTE DES COMPOSANTS
LATO COMPONENTI

19310-469.00
NF-Teil, Lötseite
AF-UNIT, SOLDER SIDE
PARTIE-FA, COTE SOUDURES
PARTE-BF, LATO SALDATURE

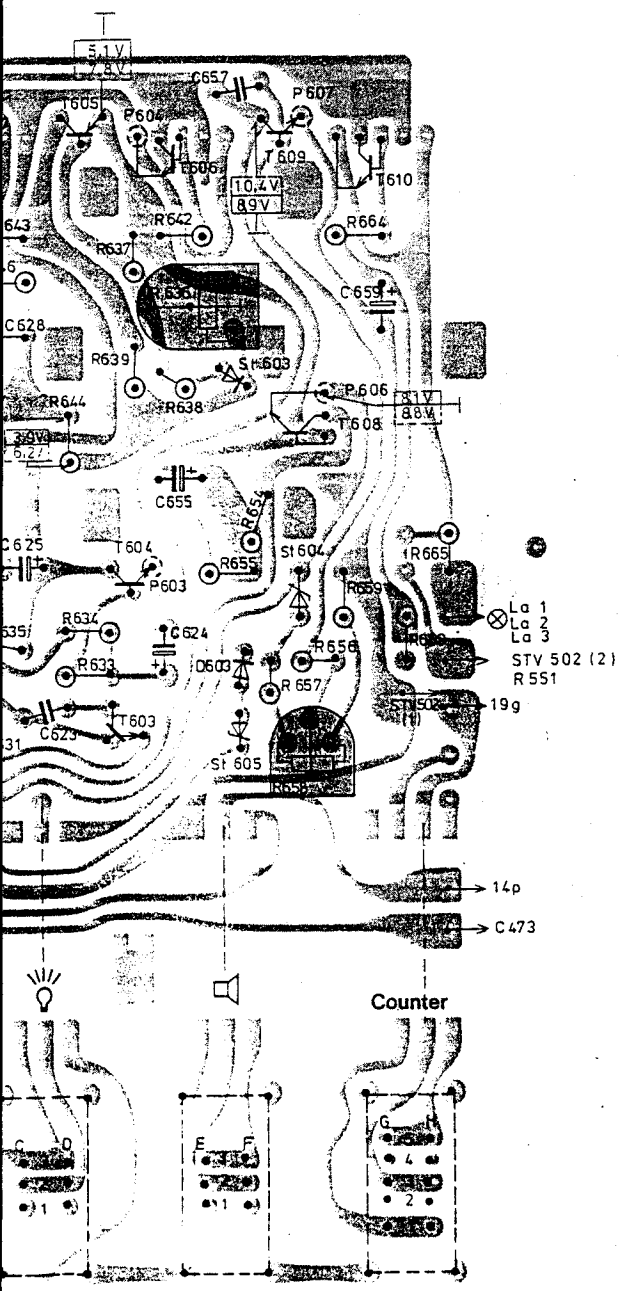


kungsseite
NENT SIDE
S, COTE COMPOSANTS
DRE, LATO COMPONENTI

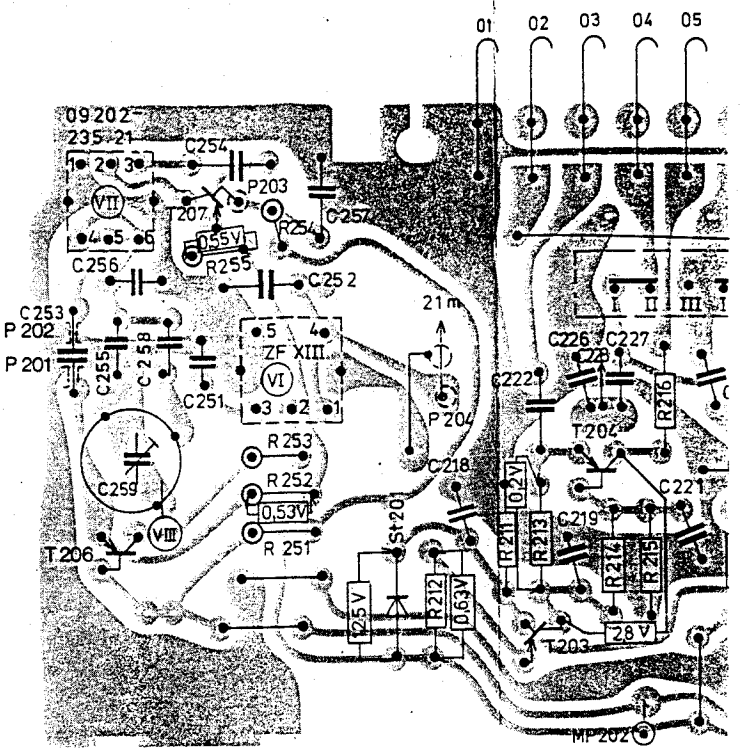
Lötseite
SOLDER SIDE
COTE DES SOUDURES
LATO SALDATURE

Bestückungsseite
COMPONENT SIDE
VUE DU COTE DES COMPOSANTS
LATO COMPONENTI

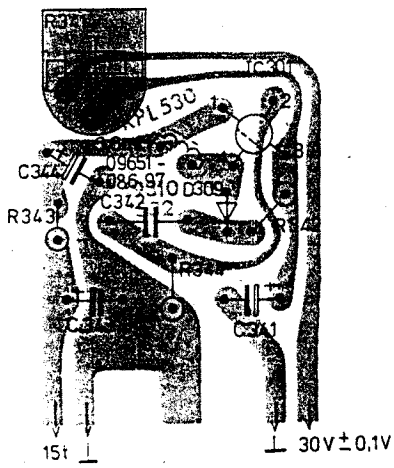
19310-469.00
NF-Teil, Lötseite
AF-UNIT, SOLDER SIDE
PARTIE-FA, COTE SOUDURES
PARTE-BF, LATO SALDATURE



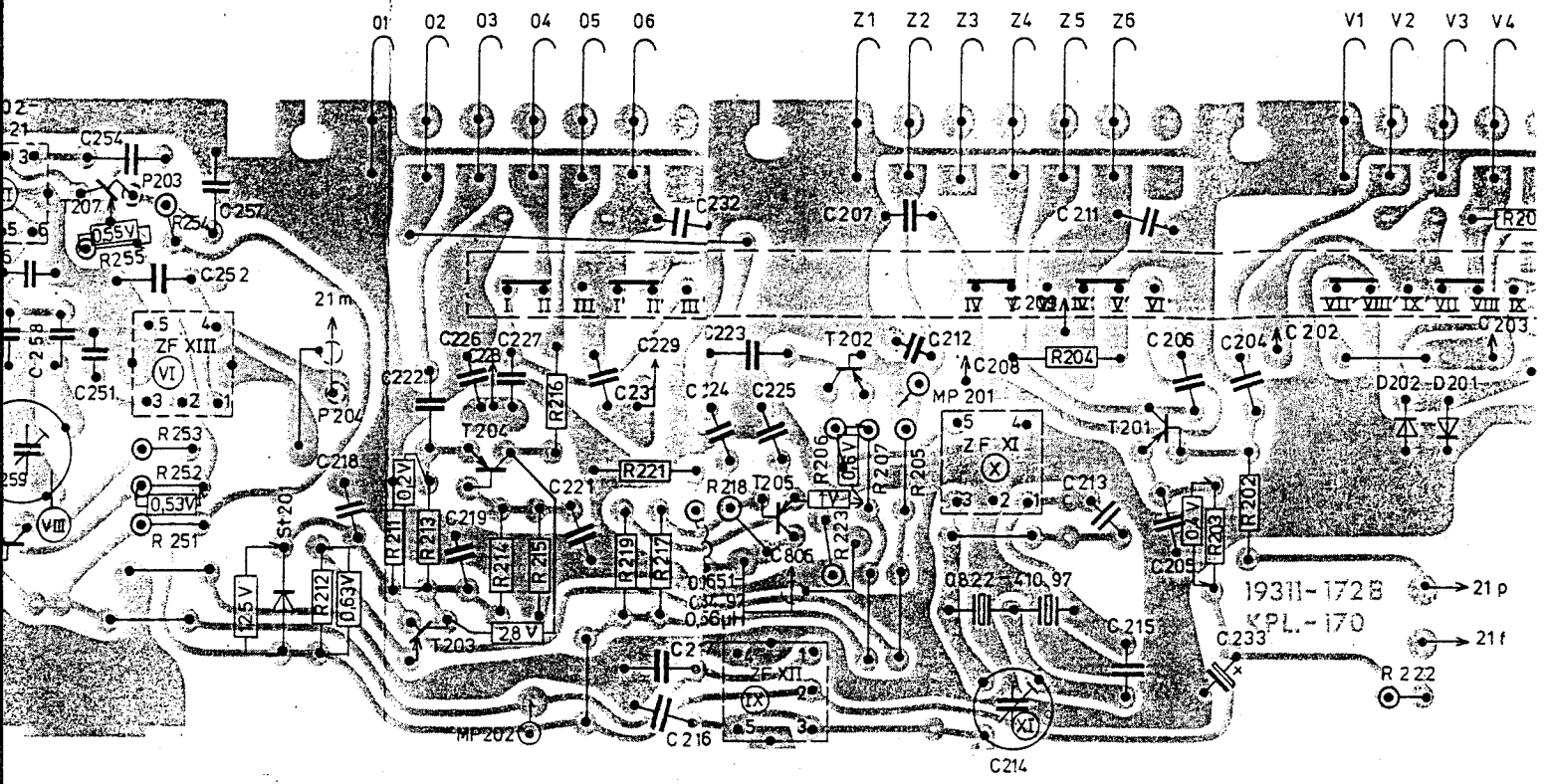
19311-168.00
Tuner-Platte, Lötseite
TUNER-BOARD, SOLDER SIDE
PLAQUE-TUNER, COTE SOUDURES
PIASTRA-TUNER, LATO SALDATURE



19310-528.00
30 V-Wandler, Lötseite
30 V-TRANSFORMER, SOLDER SIDE
TRANSDUCTEUR 30 V, COTE SOUDURES
CONVERTITORE 30 V, LATO SALDATURE

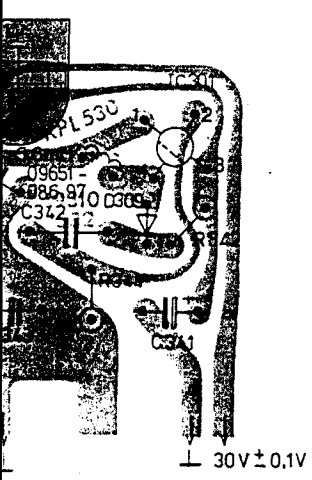


11-168.00
er-Platte, Lötseite
ER-BOARD, SOLDER SIDE
QUE-TUNER, COTE SOUDURES
TRA-TUNER, LATO SALDATURE



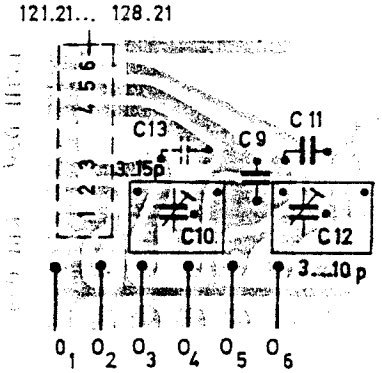
10-528.00
-Wandler, Lötseite
TRANSFORMER, SOLDER SIDE
ISDUCTEUR 30 V, COTE SOUDURES
VERTITORE 30 V, LATO SALDATURE

Kontaktplatte, Lötseite
CONTACT PLATE, SOLDER SIDE
PLAQUE DE CONTACT, COTE SOUDURES
PIASTRA DI CONTATTO, LATO SALDATURE



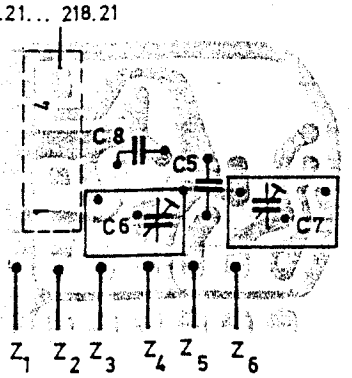
Oszillatorkreis
OSCILLATOR CIRCUIT
CIRCUIT D'OSCILLATEUR
CIRCUITO OSCILLATORE

09225-
121.21... 128.21



Zwischenkreis
INTERMEDIATE CIRCUIT
CIRCUIT INTERMEDIAIRE
CIRCUITO INTERMEDIO

09225-
211.21... 218.21

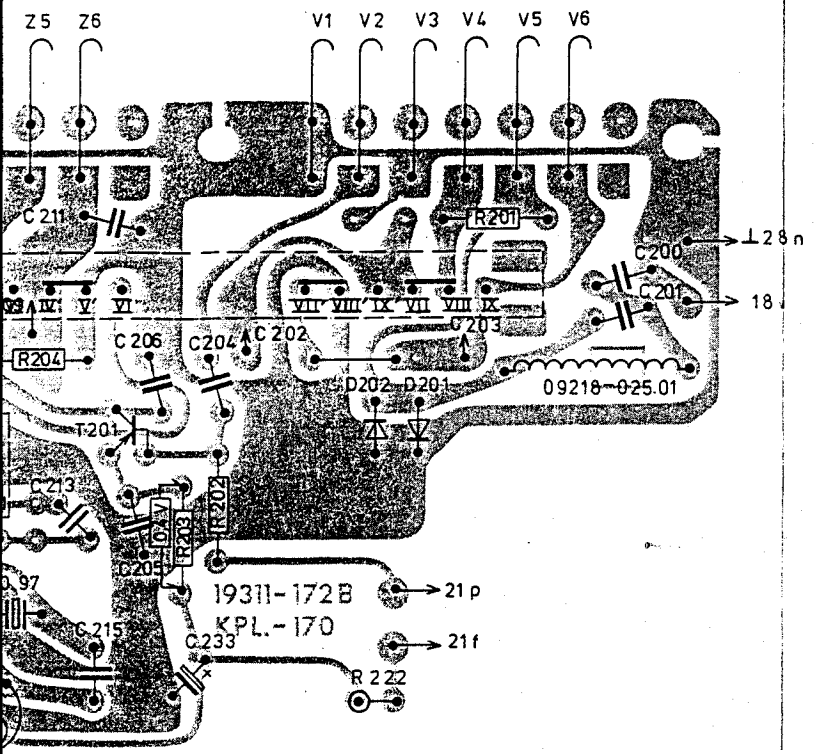


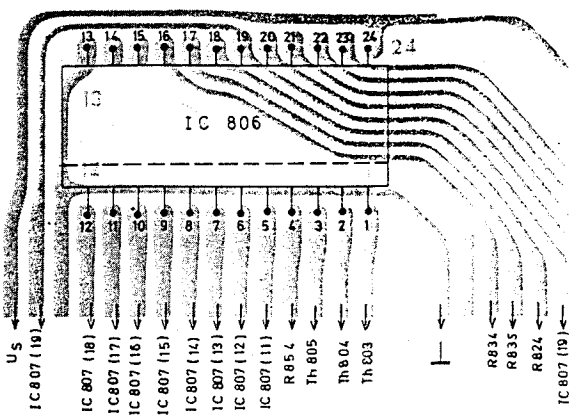
Vorkreis
INPUT CIRC
CIRCUIT D'
PRESTADIO

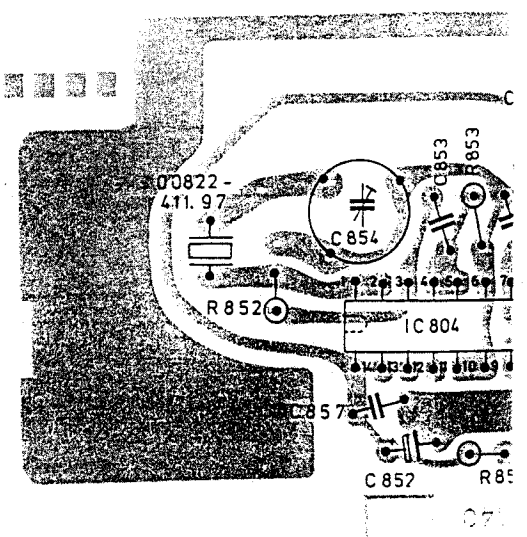
09225-
101.21 ... 10
206.21... 20

19415 - 121.00... -128.00

19311-179.00
MOS JC - Platte, Lötseite
MOS JC-BOARD, SOLDER SIDE
PLAQUE-MOS JC, COTE SOUDURES
PIASTRA-MOS JC, LATO SALDATURE

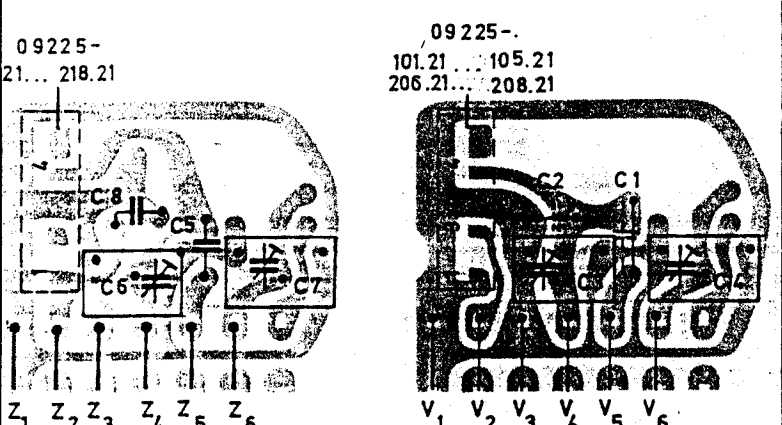






Zwischenkreis
INTERMEDIATE CIRCUIT
CIRCUIT INTERMEDIAIRE
CIRCUITO INTERMEDIO

Vorkreis
INPUT CIRCUIT
CIRCUIT D'ENTREE
PRESTADIO

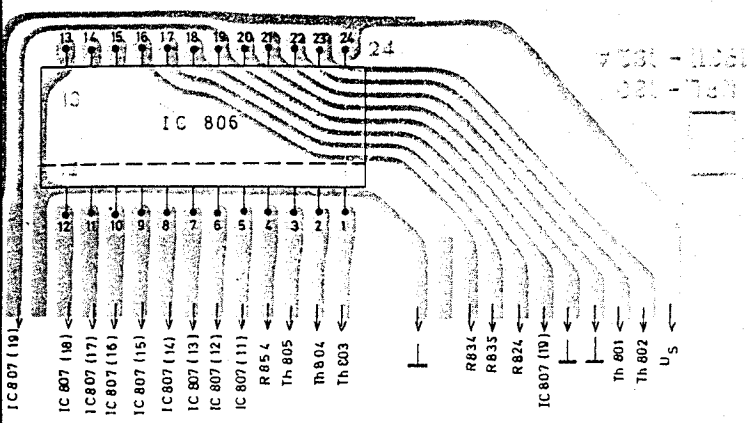


19311-139.00
Oszillator-Platte, Lötseite
OSCILLATOR-BOARD, SOLDER SIDE
PLAQUE-OSCILLATEUR, COTE SOUDURE
PIASTRA OSCILLATORE, LATO SALDATUI

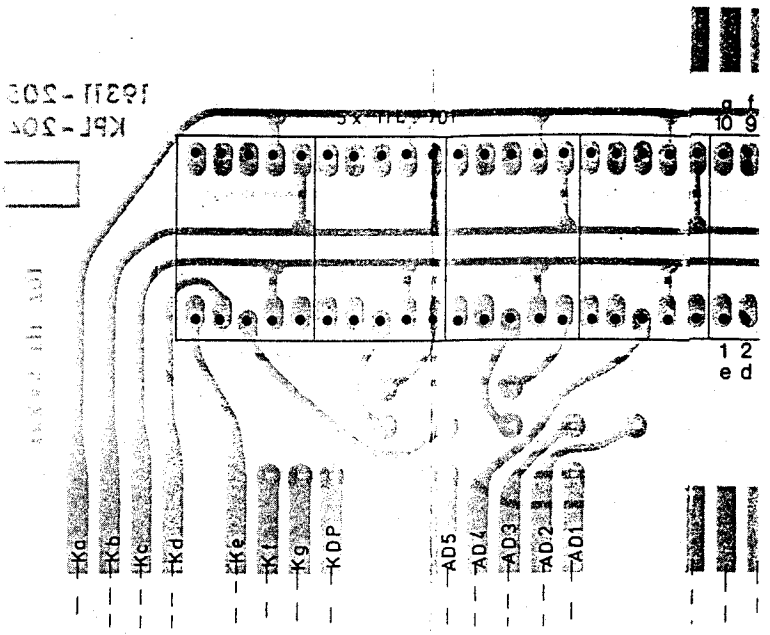
19415 - 121.00... -128.00

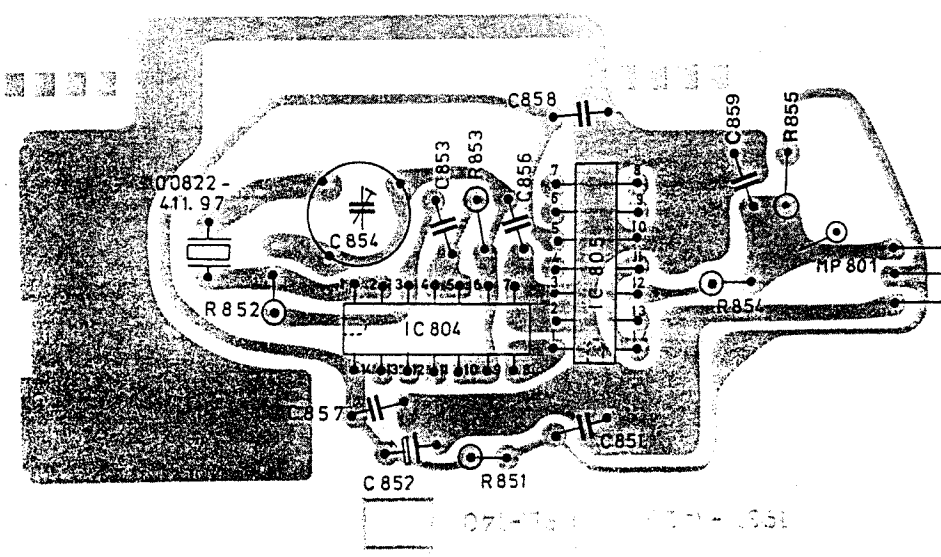
Lötseite
SOLDER SIDE
COTE DES SOUDURES
LATO SALDATURE

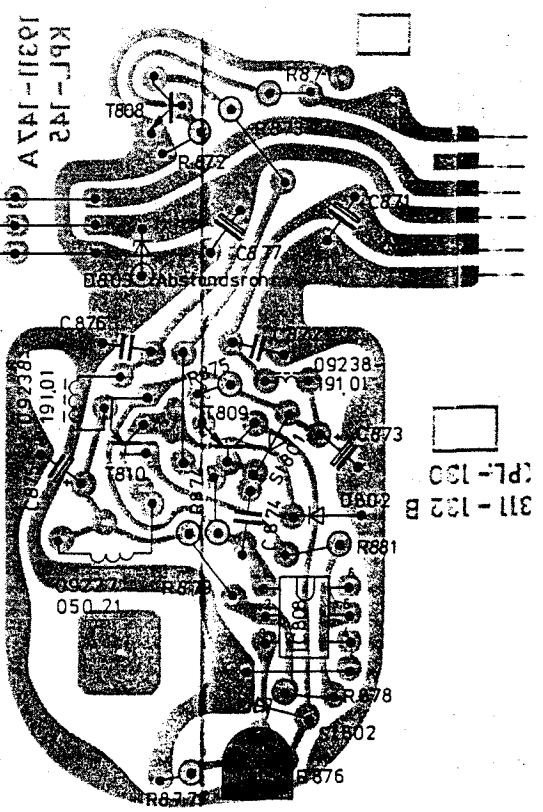
9311-179.00
OS JC - Platte, Lötseite
OS JC-BOARD, SOLDER SIDE
LAQUE-MOS JC, COTE SOUDURES
ASTRA-MOS JC, LATO SALDATURE



19311-203.00
Anzeige-Platte, Bestückungsseite
DISPLAY-BOARD, COMPONENT SIDE
PLAQUE D'AFFICHAGE, COTE COMPOSANTS
PIASTRA INDICATORE, LATO COMPONENTI







19311-139.00
Oszillator-Platte, Lötseite
OSCILLATOR-BOARD, SOLDER SIDE
PLAQUE-OSCILLATEUR, COTE SOUDURES
PIASTRA OSCILLATORE, LATO SALDATURE

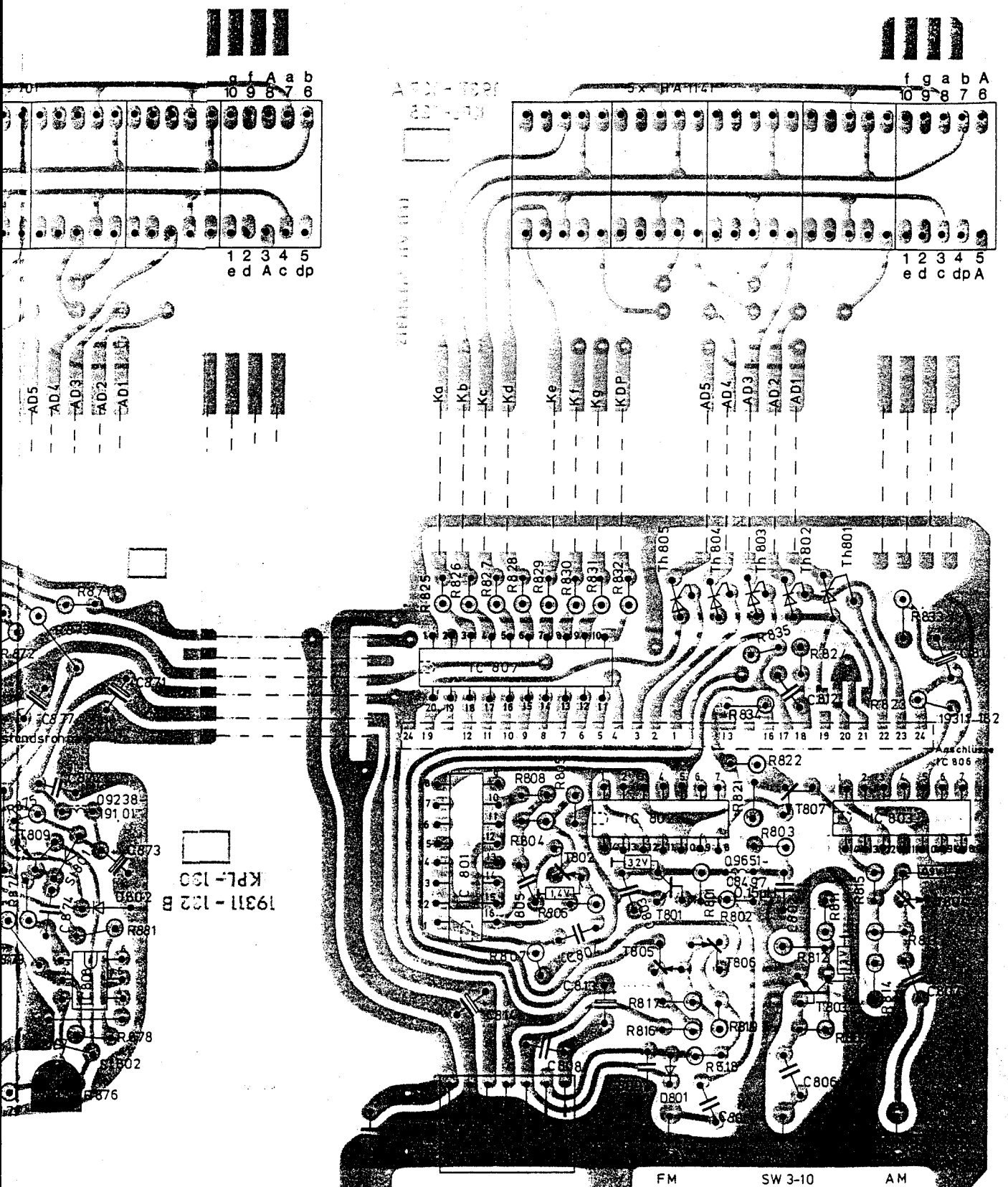
Lötseite
SOLDER SIDE
COTE DES SOUDURES
LATO SALDATURE

Bestückungsseite
COMPONENT SIDE
VUE DU COTE DES COMPOSANTS
LATO COMPONENTI

19311-196.00
5 V-Wandler, Bestückungsseite
5 V-TRANSFORMER, COMPONENT SIDE
TRANSDUCTEUR-5 V, COTE COMPOSANTS
CONVERTITORE-5 V, LATO COMPONENTI

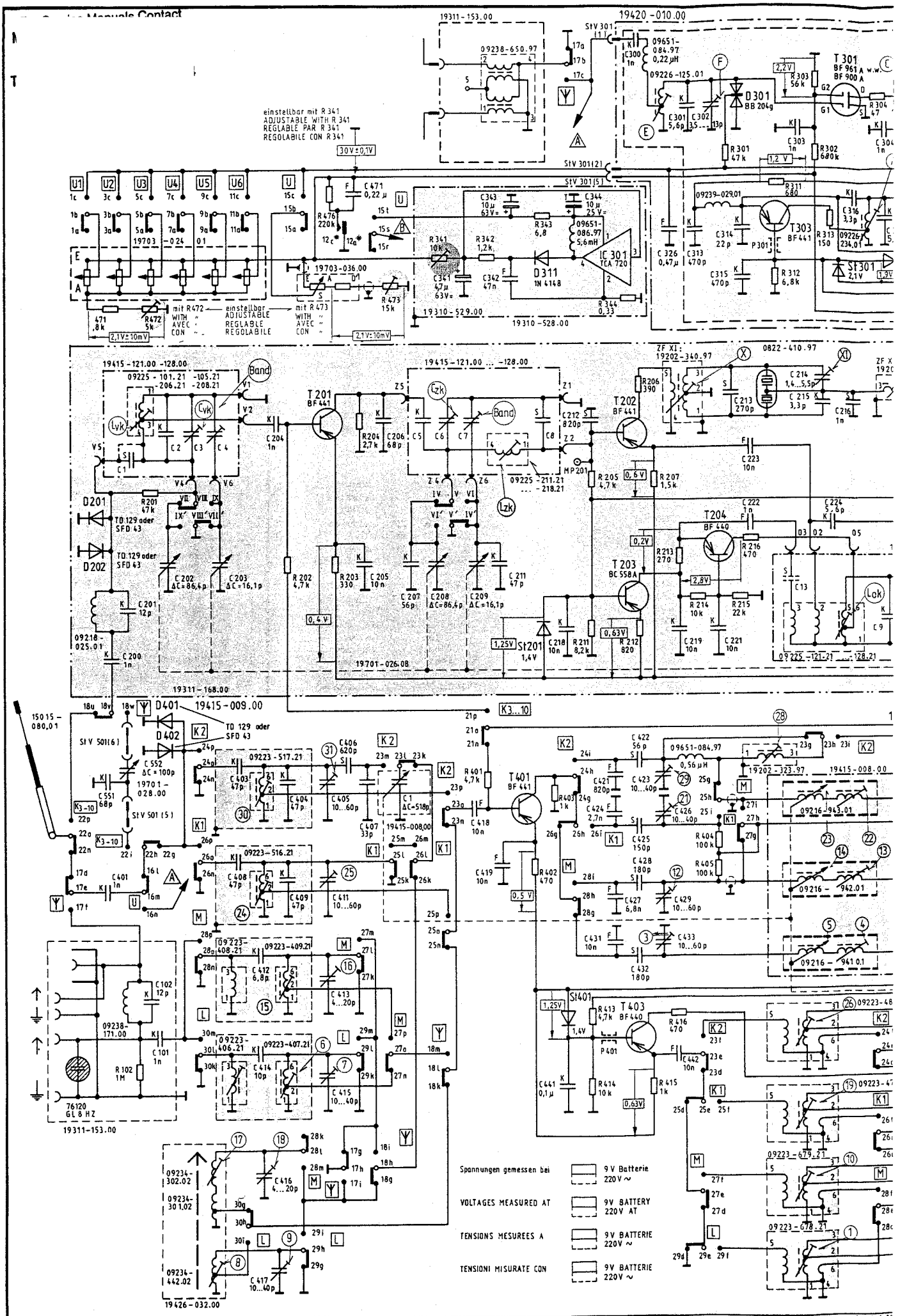
gsseite
NT SIDE
COMPOSANTS
COMPONENTI

19311-134.00
Anzeige-Platte, Bestückungsseite
DISPLAY-BOARD, COMPONENT SIDE
PLAQUE D'AFFICHAGE, COTE COMPOSANTS
PIASTRA INDICATORE, LATO COMPONENTI



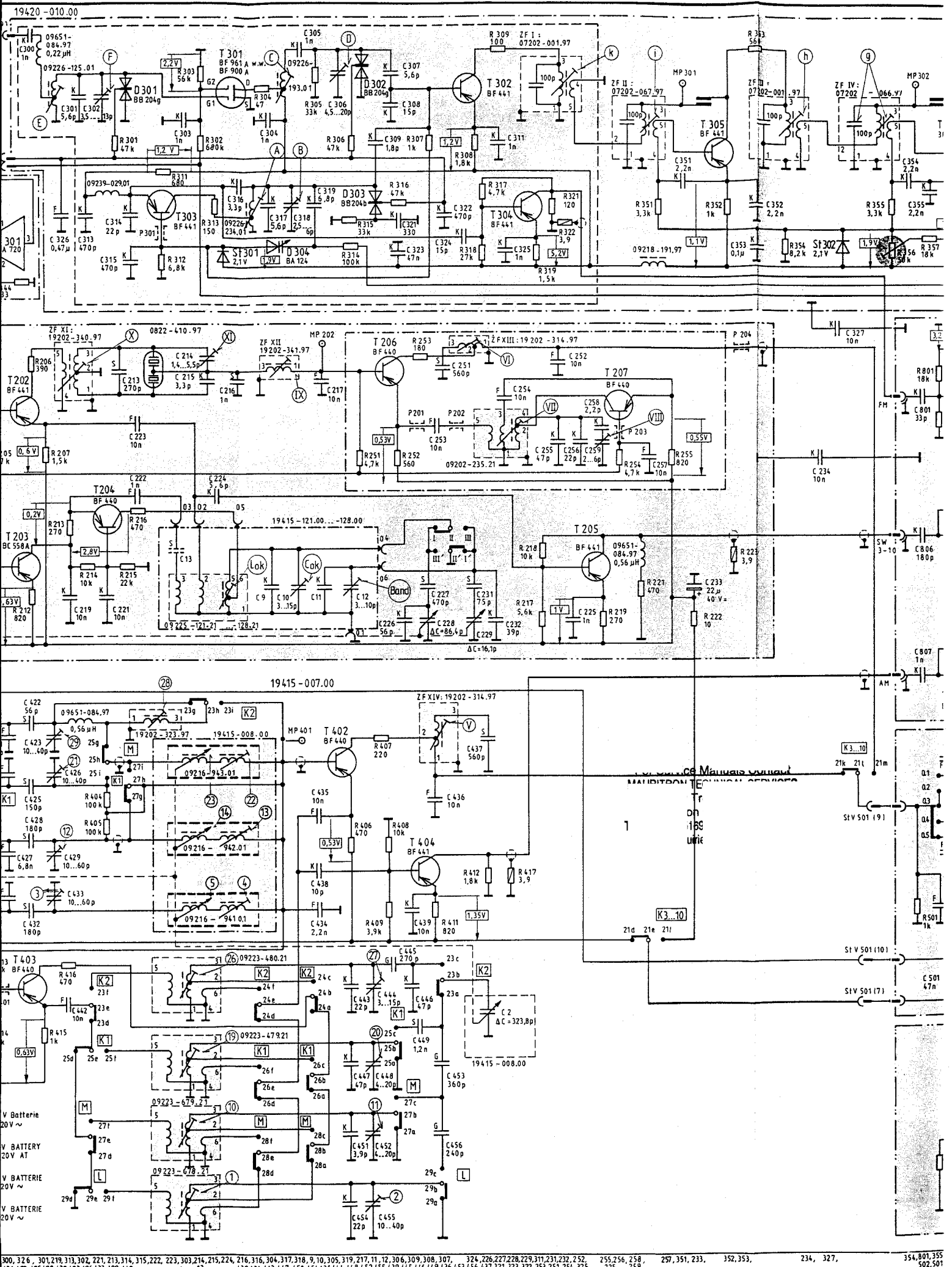
0
Bestückungsseite
MER, COMPONENT SIDE
R-5 V, COTE COMPOSANTS
E-5 V, LATO COMPONENTI

19311-129.00
Verstärkerplatte, Lötseite
AMPLIFIER BOARD, SOLDER SIDE
PLAQUE AMPLIFICATEUR, COTE SOUDURES
PIASTRA AMPLIFICATORE, LATO SALDATURE

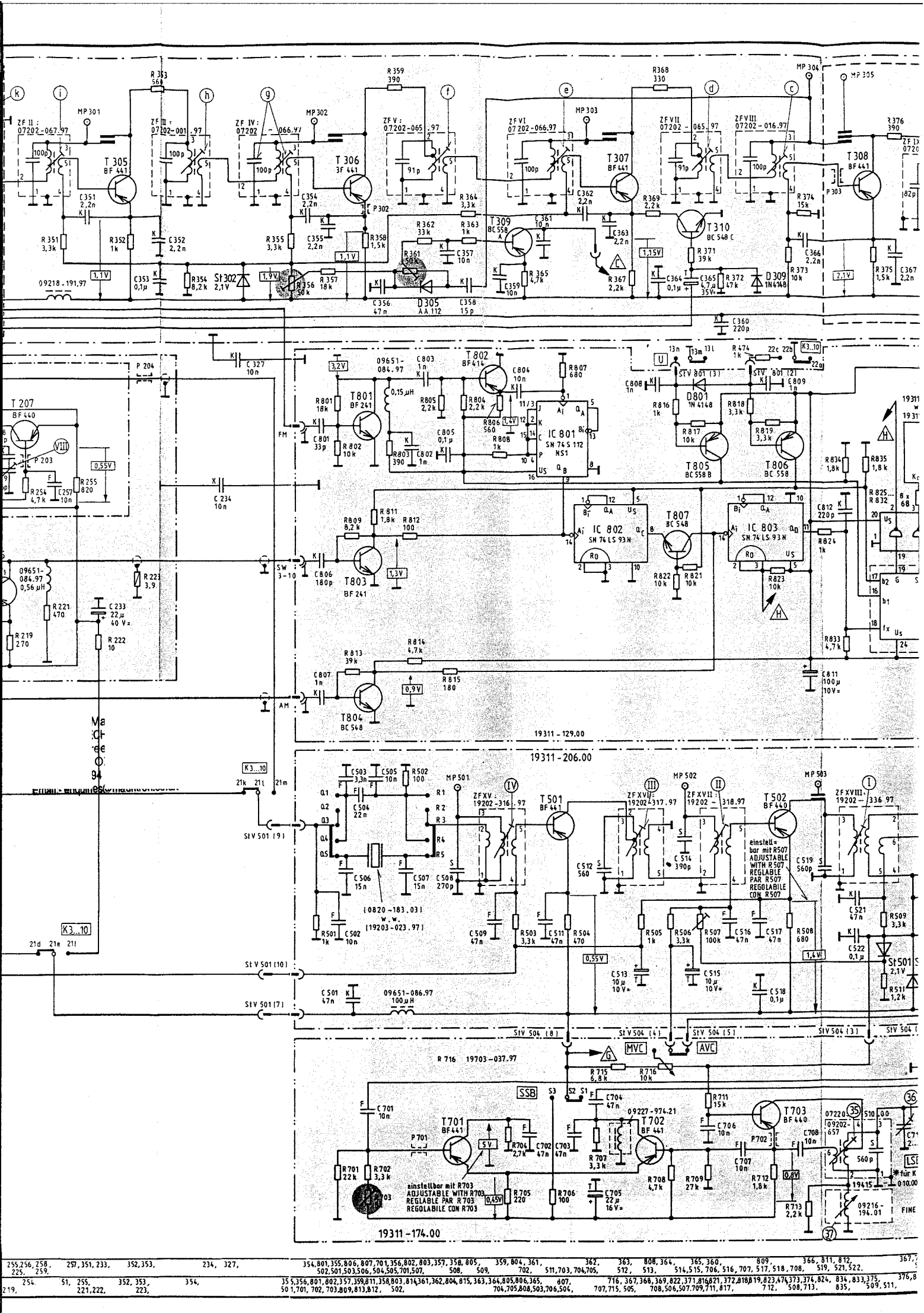


C : 200, 201, 1, 202, 2,3,4, 203, 204, 405,406,407,471,205, 206. 207, 208, 5,6,7, 341, 209, 211,342, 343, 218,344, 212, 300, 326, 301,219,313,302, 221, 213,314, 315,222, 223,303,214,215,224, 216,316, 30
401,551, 552, 102, 101, 403,408, 412,414,416, 417, 404,409, 411,413, 415, 418,419, 8, 441, 421,424,427,431,422, 425,428,432,423,426,433,429,442, 13, 438,434,44

R : 471, 201,472, 202, 476, 203,204, 473, 341, 401, 342, 343, 402, 403, 211, 205, 344,206,207, 213, 214, 215,301, 216,311,312,302,303,313, 304, 404,405, 102, 413, 414, 212, 415,416,

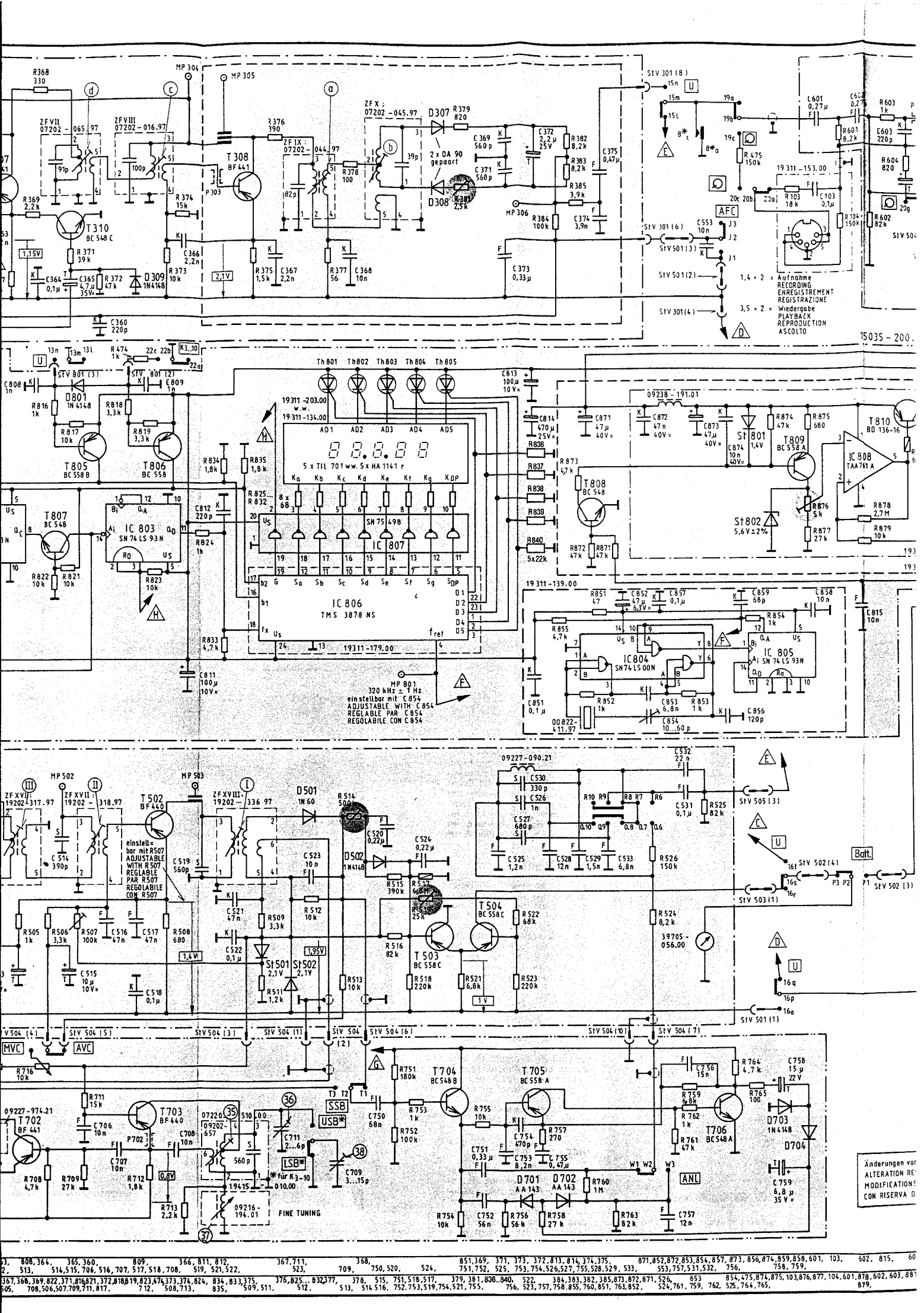


300, 326, 301, 219, 313, 302, 221, 213, 314, 315, 222, 223, 303, 214, 215, 224, 216, 316, 304, 317, 318, 9, 10, 305, 319, 217, 11, 12, 306, 309, 308, 307, 324, 226, 227, 228, 229, 311, 231, 232, 252, 255, 256, 258, 257, 351, 233, 352, 353, 234, 327, 354, 801, 355, 502, 501
431, 422, 425, 428, 432, 423, 426, 433, 429, 442, 13, 438, 434, 443, 447, 451, 454, 435, 444, 448, 452, 455, 439, 445, 446, 449, 436, 453, 456, 437, 321, 323, 322, 253, 251, 254, 325, 225, 259,
5, 344, 206, 207, 213, 214, 215, 301, 216, 311, 312, 302, 303, 313, 304, 305, 306, 314, 315, 251, 316, 252, 307, 253, 308, 317, 318, 309, 319, 321, 322, 254, 51, 255, 352, 353, 354, 355, 356, 801, 802,
4, 212, 415, 416, 404, 405, 406, 407, 408, 409, 411, 412, 417, 217, 218, 219, 221, 222, 223, 501, 701, 702, 703,

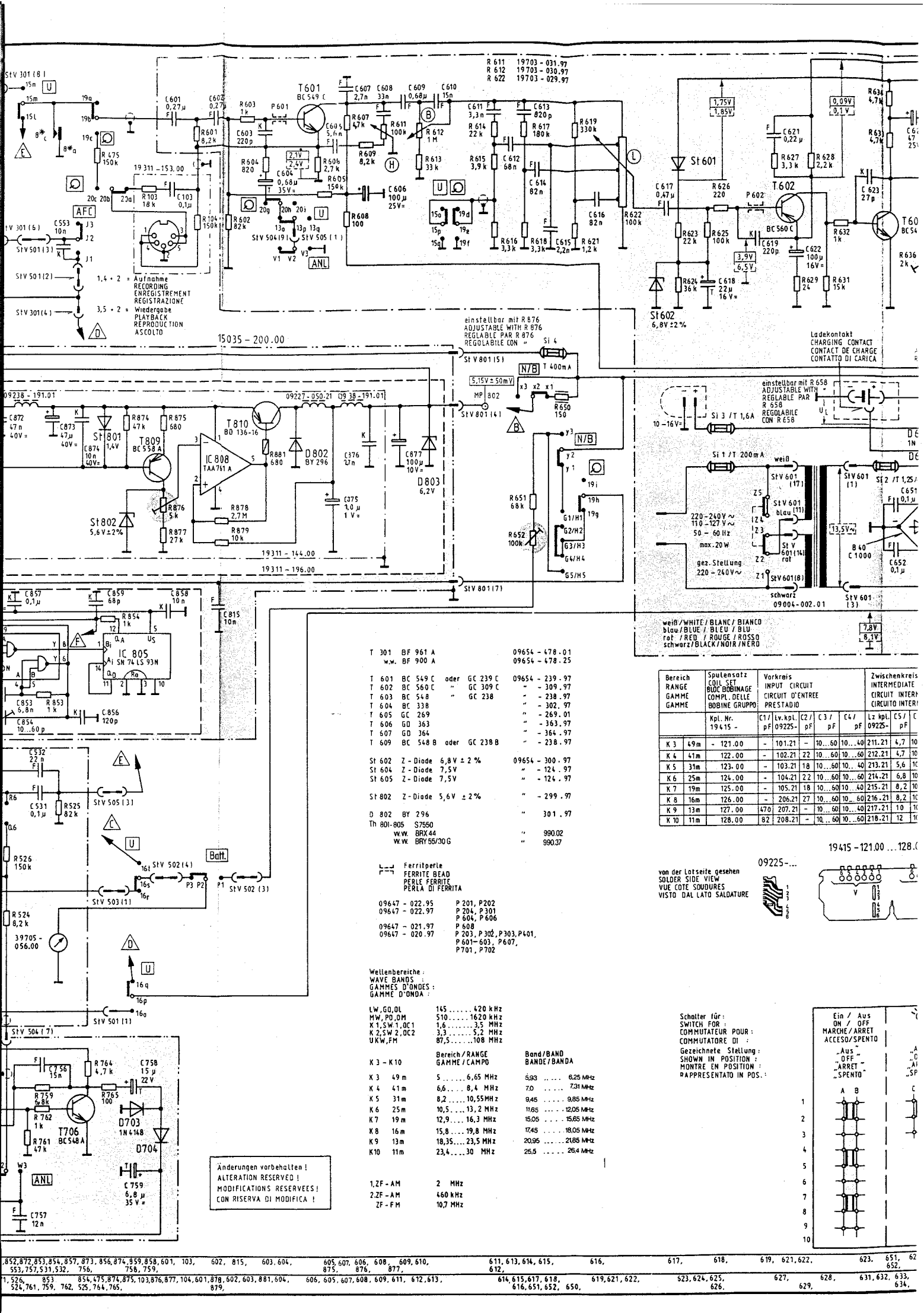


255,256, 258, 225, 259, 257, 351, 233, 352,353, 234, 327, 354,801,355,806, 807,701,356,802, 803,357, 358, 805, 502,501,503,506, 504,505,701,507, 359, 804, 361, 508, 509, 362, 702, 511,703, 704,705, 363, 512, 513, 808, 364, 514,515, 706, 516, 365, 360, 707, 517, 518, 708, 809, 519, 521,522, 366, 811, 812, 367,

254, 219, 51, 255, 221,222, 352, 353, 223, 354, 355,356,801,802,357,359,811,358,803,814,361,362,804, 815, 363,364,805,806,365, 501,701, 702, 703,809,813,812, 502, 807, 704,705,808,503,706,504, 716, 367,368,369,822,371,816,821,372,818,819,823,474,373,374,824, 707,715, 505, 834,833,375, 708,506,507,709,711,817, 376,8 712, 508,713, 835, 509, 511,



808, 364, 365, 360, 809, 366, 811, 812, 367, 711, 368, 851, 369, 371, 373, 372, 813, 814, 374, 375, 871, 852, 872, 853, 854, 857, 873, 856, 874, 859, 858, 601, 103, 602, 815, 60
2, 513, 514, 515, 706, 516, 707, 517, 518, 708, 519, 521, 522, 523, 709, 750, 520, 524, 751, 752, 525, 753, 754, 526, 527, 755, 528, 529, 533, 553, 757, 531, 532, 756, 758, 759,
367, 368, 369, 822, 371, 816, 821, 372, 818, 819, 823, 674, 373, 374, 824, 834, 833, 375, 376, 825, 832, 377, 378, 515, 751, 518, 517, 379, 381, 838, 840, 522, 384, 383, 382, 385, 873, 872, 871, 526, 853 854, 475, 874, 875, 103, 876, 877, 104, 601, 878, 602, 603, 881
505, 708, 506, 507, 709, 711, 817, 712, 508, 713, 835, 509, 511, 512, 513, 514, 516, 752, 753, 519, 754, 521, 755, 756, 523, 757, 758, 855, 760, 851, 763, 852, 524, 761, 759, 762, 525, 764, 765, 879,


R 611 19703 - 031.97
R 612 19703 - 030.97
R 622 19703 - 029.97
T601 BC 549 C
T602 BC 560 C
St 601
St 602 6,8V ±2%
St 801
T809 BC 558 A
T810 BD 136-16
IC 808 TAA 761 A
D802 BY 296
D803 6,2V
St 802 5,6V±2%
IC 805 SN 74 LS 93N
T706 BC548A
D703 1N4148
D704
St V 301 (8)
St V 301 (6)
St V 301 (3)
St V 301 (2)
St V 301 (4)
1,4 + 2 = Aufnahme RECORDING ENREGISTREMENT REGISTRAZIONE
3,5 + 2 = Wiedergabe PLAYBACK REPRODUCTION ASCOLTO
15035 - 200.00
einstellbar mit R 876 ADJUSTABLE WITH R 876 REGLABLE PAR R 876 REGOLABILE CON "
St V 801 (5)
St V 801 (4)
St V 801 (7)
N/B
T 400mA
5,15V ± 50mV
MP 802
R 650 150
Si 4
Si 3 /T 1,6A
Si 1 /T 200mA
Si 2 /T 1,25A
Ladekontakt CHARGING CONTACT CONTACT DE CHARGE CONTATTO DI CARICA
einstellbar mit R 658 ADJUSTABLE WITH R 658 REGLABLE PAR R 658 REGOLABILE CON R 658
St V 601 (17)
St V 601 (1)
St V 601 (3)
St V 601 (11) blau
St V 601 (14) rot
St V 601 (8) schwarz
220 - 240V ~ 110 - 127 V ~ 50 - 60 Hz max. 20 W
gez. Stellung 220 - 240V ~
B 40 C 1000
13,5V ~
09004-002.01
weiß / WHITE / BLANC / BIANCO
blau / BLUE / BLEU / BLU
rot / RED / ROUGE / ROSSO
schwarz / BLACK / NOIR / NERO
7,8V
8,1V
19311 - 153.00
19311 - 144.00
19311 - 196.00
09238 - 191.01
09227 - 050.21
09238 - 191.01
AFC
ANL
Batt.
St V 502 (4)
St V 502 (3)
St V 503 (1)
St V 505 (3)
St V 501 (1)
St V 504 (7)
St V 505 (1)
39705 - 056.00
Ferritperle FERRITE BEAD PERLE FERRITE PERLA DI FERRITA
09647 - 022.95 P 201, P202
09647 - 022.97 P 204, P 301 P 604, P 606
09647 - 021.97 P 608
09647 - 020.97 P 203, P 302, P303, P401, P 601 - 603, P607, P701, P702
Wellenbereiche : WAVE BANDS : GAMMES D'ONDES : GAMME D'ONDA :
LW, GO, OL 145 ..... 420 kHz
MW, PO, OM 510 ..... 1620 kHz
K 1, SW 1, OC1 1,6 ..... 3,5 MHz
K 2, SW 2, OC2 3,3 ..... 5,2 MHz
UKW, FM 87,5 ..... 108 MHz
Bereich / RANGE / GAMME / CAMPO
Band / BAND / BANDE / BANDA
K 3 - K10
K 3 49 m S ..... 6,65 MHz 5,93 ..... 6,25 MHz
K 4 41 m 6,6 .... 8,4 MHz 7,0 ..... 7,31 MHz
K 5 31 m 8,2 ..... 10,55 MHz 9,45 ..... 9,85 MHz
K 6 25 m 10,5 .... 13,2 MHz 11,65 ..... 12,05 MHz
K 7 19 m 12,9 .... 16,3 MHz 15,05 ..... 15,65 MHz
K 8 16 m 15,8 ..... 19,8 MHz 17,45 ..... 18,05 MHz
K 9 13 m 18,35 .... 23,5 MHz 20,95 ..... 21,85 MHz
K10 11 m 23,4 .... 30 MHz 25,5 ..... 26,4 MHz
1. ZF - AM 2 MHz
2. ZF - AM 460 kHz
ZF - FM 10,7 MHz
Änderungen vorbehalten ! ALTERATION RESERVED ! MODIFICATIONS RESERVEES ! CON RISERVA DI MODIFICA !
Schalter für : SWITCH FOR : COMMUTATEUR POUR : COMMUTATORE DI :
Gezeichnete Stellung : SHOWN IN POSITION : MONTRE EN POSITION : RAPPRESENTATO IN POS. :
Ein / Aus ON / OFF MARCHE / ARRET ACCESO / SPENTO
„Aus" „OFF" „ARRET" „SPENTO"

T 301	BF 961 A	09654 - 478.01
	w.w. BF 900 A	09654 - 478.25
T 601	BC 549 C oder GC 239 C	09654 - 239.97
T 602	BC 560 C " GC 309 C	" - 309.97
T 603	BC 548 " GC 238	" - 238.97
T 604	BC 338	" - 302.97
T 605	GC 269	" - 269.01
T 606	GD 363	" - 363.97
T 607	GD 364	" - 364.97
T 609	BC 548 B oder GC 238 B	" - 238.97
St 602	Z - Diode 6,8 V ± 2 %	09654 - 300.97
St 604	Z - Diode 7,5 V	" - 124.97
St 605	Z - Diode 7,5 V	" - 124.97
St 802	Z - Diode 5,6 V ± 2 %	" - 299.97
D 802	BY 296	" 301.97
Th 801-805	S7550	
	w.w. BRX 44	" 990.02
	w.w. BRY 55/30 G	" 990.37

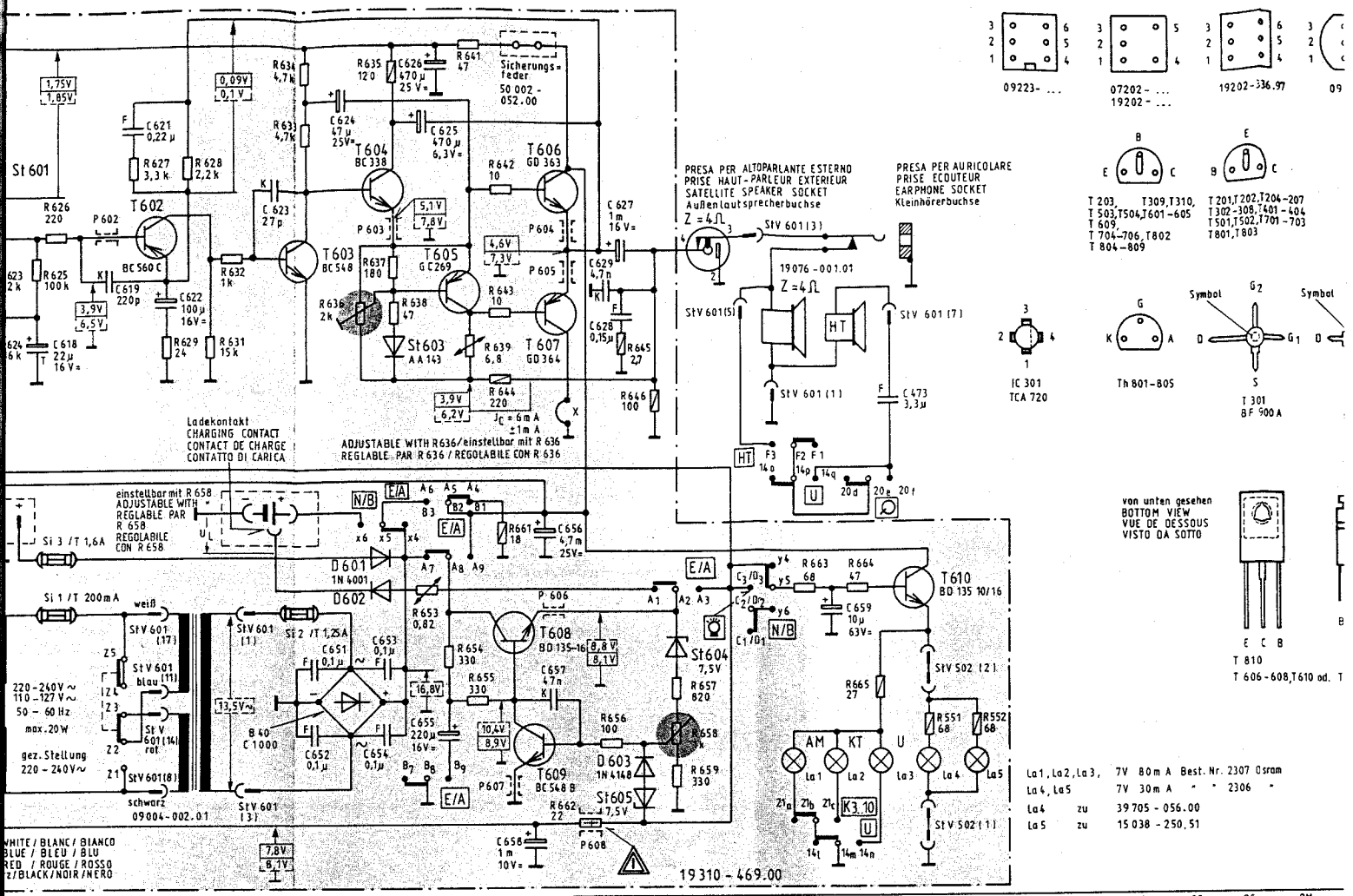
Bereich RANGE GAMME GAMME	Spulensatz COIL SET BLOC BOBINAGE COMPL. DELLE BOBINE GRUPPO		Vorkreis INPUT CIRCUIT CIRCUIT D'ENTREE PRESTADIO				Zwischenkreis INTERMEDIATE CIRCUIT INTERM CIRCUITO INTERM		
	Kpl. Nr. 19415 -		C1/ pF	Lv. kpl. 09225-	C2/ pF	C3/ pF	C4/ pF	Lz kpl. 09225-	C5/ pF	C
K 3	49m	- 121.00	-	101.21	-	10...60	10...40	211.21	4,7	10
K 4	41m	122.00	-	102.21	22	10...60	10...60	212.21	4,7	10
K 5	31m	123.00	-	103.21	18	10...60	10...40	213.21	5,6	10
K 6	25m	124.00	-	104.21	22	10...60	10...60	214.21	6,8	10
K 7	19m	125.00	-	105.21	18	10...60	10...40	215.21	8,2	10
K 8	16m	126.00	-	206.21	27	10...60	10...60	216.21	8,2	10
K 9	13m	127.00	470	207.21	-	10...60	10...40	217.21	10	10
K 10	11m	128.00	82	208.21	-	10...60	10...60	218.21	12	10

19415 - 121.00 ... 128.0

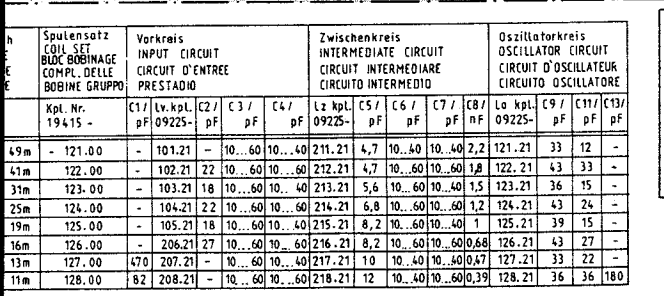
09225-...

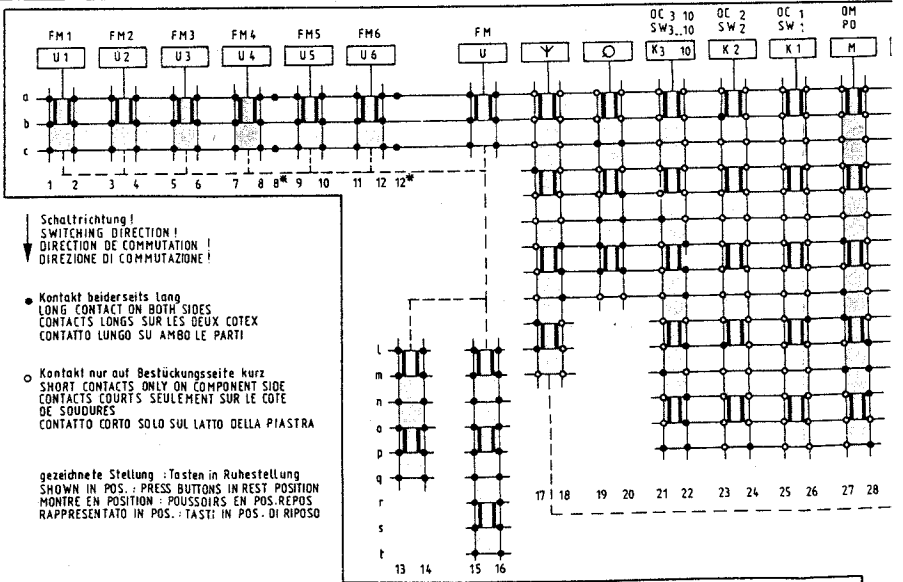
von der Lotseite gesehen SOLDER SIDE VIEW VUE COTE SOUDURES VISTO DAL LATO SALDATURE

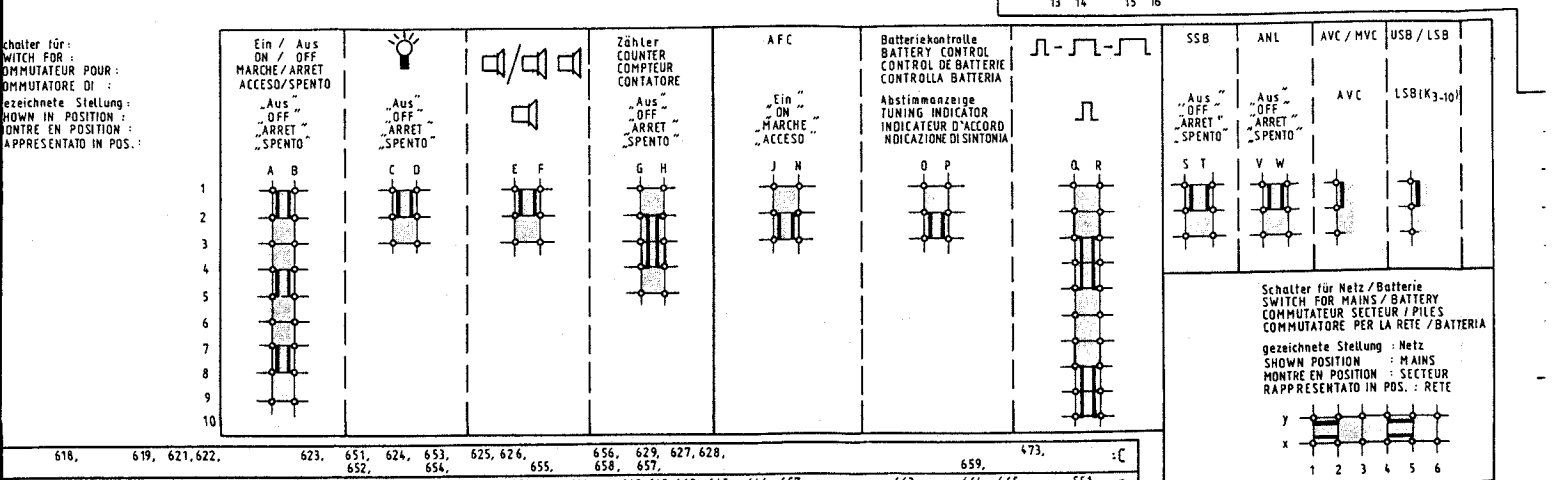
,852, 872, 853, 854, 857, 873, 856, 874, 959, 858, 601, 103, 602, 815, 603, 604, 605, 607, 606, 608, 609, 610, 611, 613, 614, 615, 616, 617, 618, 619, 621, 622, 623, 651, 62
553, 757, 531, 532, 756, 758, 759, 875, 876, 877, 612, 652,
1, 526, 853 854, 475, 874, 875, 103, 876, 877, 104, 601, 878, 602, 603, 881, 604, 606, 605, 607, 608, 609, 611, 612, 613, 614, 615, 617, 618, 619, 621, 622, 623, 624, 625, 627, 628, 631, 632, 633,
524, 761, 759, 762, 525, 764, 765, 879, 616, 651, 652, 650, 626, 629, 634,



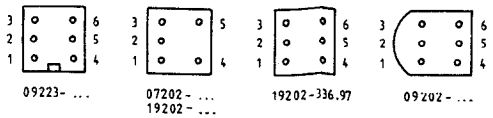
Spulensatz COIL SET BLOC BOBINAGE COMPL. DELLE BOBINE GRUPPO		Vorkreis INPUT CIRCUIT CIRCUIT D'ENTREE PRESTADIO				Zwischenkreis INTERMEDIATE CIRCUIT CIRCUIT INTERMEDIAIRE CIRCUITO INTERMEDIO					Oszillatorkreis OSCILLATOR CIRCUIT CIRCUIT D'OSCILLATEUR CIRCUITO OSCILLATORE			
	Kpl. Nr. 19415 -	C1 / pF	Lv. kpl. 09225-	C2 / pF	C3 / pF	C4 / pF	Lz kpl. 09225-	C5 / pF	C6 / pF	C7 / pF	C8 / nF	Lo kpl. 09225-	C9 / pF	C11 / C13 / pF
49m	- 121.00	-	101.21	-	10...60	10...40	211.21	4,7	10...40	10...40	2,2	121.21	33	12 -
41m	122.00	-	102.21	22	10...60	10...60	212.21	4,7	10...60	10...60	1,8	122.21	43	33 -
31m	123.00	-	103.21	18	10...60	10...40	213.21	5,6	10...60	10...40	1,5	123.21	36	15 -
25m	124.00	-	104.21	22	10...60	10...60	214.21	6,8	10...60	10...60	1,2	124.21	43	24 -
19m	125.00	-	105.21	18	10...60	10...40	215.21	8,2	10...60	10...40	1	125.21	39	15 -
16m	126.00	-	206.21	27	10...60	10...60	216.21	8,2	10...60	10...60	0,68	126.21	43	27 -
13m	127.00	470	207.21	-	10...60	10...40	217.21	10	10...40	10...60	0,47	127.21	33	22 -
11m	128.00	82	208.21	-	10...60	10...60	218.21	12	10...40	10...60	0,39	128.21	36	36 180



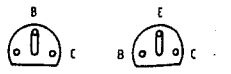




| | | | | |

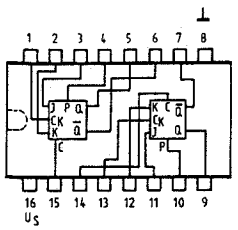


PRESA PER AURICOLARE
PRISE ECOUTEUR
EARPHONE SOCKET
Kleinhörerbuchse

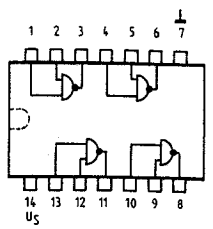


T 203, T309, T310,
T 503, T504, T601-605
T 609,
T 704-706, T802
T 804-809

T 201, T202, T204-207
T 302-308, T401-404
T 501, T502, T701-703
T 801, T803



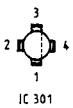
IC 801
SN 74 S 112 NS 1



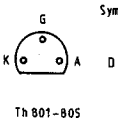
IC 804
SN 74 LS 00 N

StV 601 (7)

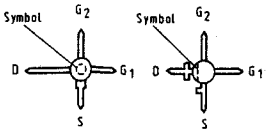
C 473
3,3µ



IC 301
TCA 720

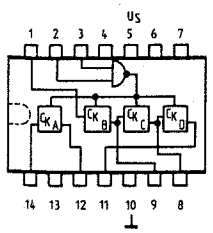


Th 801-805

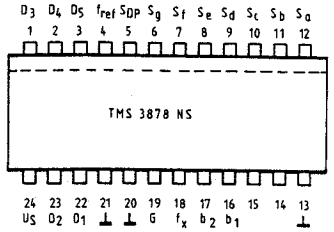


T 301
BF 900 A

T 301
BF 961 A

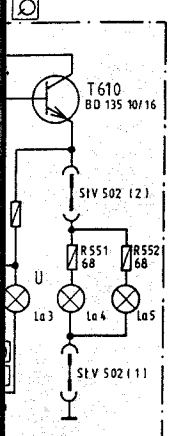


IC 802, 803, 805
SN 74 LS 93 N



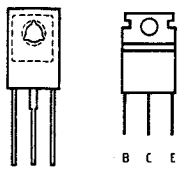
IC 806

20e 20f

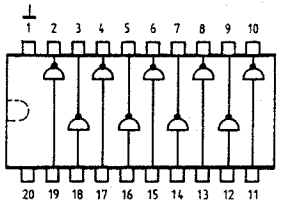


La1, La2, La3, 7V 80m A Best. Nr. 2307 Osram
La4, La5 7V 30m A " " 2306 "
La4 zu 39705 - 056.00
La5 zu 15038 - 250.51

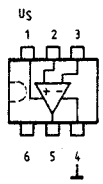
von unten gesehen
BOTTOM VIEW
VUE DE DESSOUS
VISTO DA SOTTO



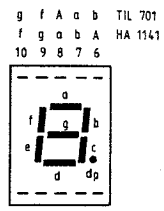
T 810
T 606-608, T610 od. T606, T607



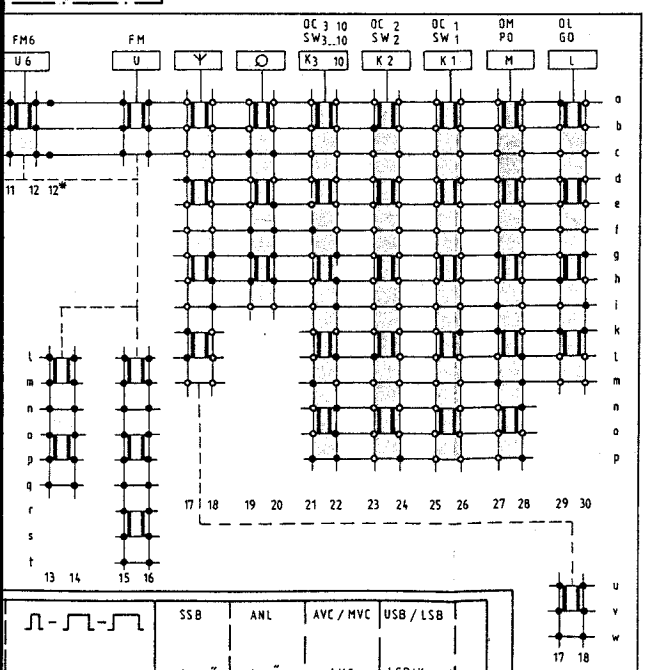
IC 807
SN 75 498

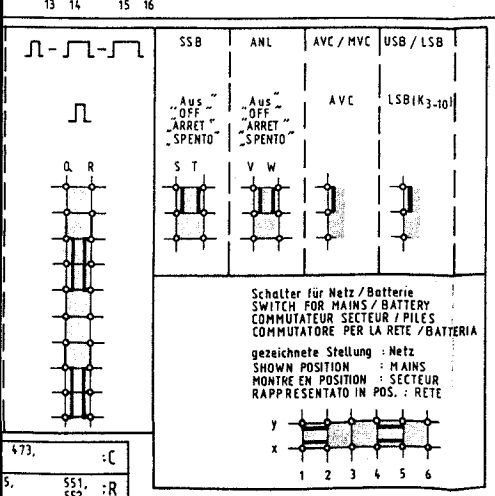


IC 808
TAA 761 A



A = gemeinsame Anode
von oben gesehen
A = ANODE IN COMMON
TOP VIEW
A = ANODE COMMUNE
VUE DE DESSOUS
A = ANODE COMUNE
VISTO DA SOPRA





473, :C
S, S51, S52, :R

FM-Teil FM-UNIT PARTIE-FM PARTE-FM	19420 - 010.00	Frequenzzähler FREQUENCY COUNTER COMPTEUR DE FREQUENCE FREQUENZIMETRO	15035 - 200.00
Ferritstabantenne kpl. FERRIT AERIAL ANTENNE FERRITE ANTENNA DI FERRITE COMPL.	19426 - 032.00	Verstärkerplatte AMPLIFIER BOARD PLAQUE AMPLIFICATEUR PIASTRA AMPLIFICATORE	19311 - 129.00
Spulensatz COIL SET BLOC BOBINAGE COMPLESSO DELLE BOBINE - GRUPPO - AF	19415 - 007.00	MOS IC-Platte MOS IC-BOARD PLAQUE-MOS IC PIASTRA-MOS IC	19311 - 179.00
Buchsenplatte SOCKET BOARD PLAQUE DE PRISES PIASTRA PRESE	19311 - 153.00	Oszillator-Platte OSCILLATOR-BOARD PLAQUE-OSCILLATEUR PIASTRA OSCILLATORE	19311 - 139.00
30V-Wandler 30V-TRANSFORMER TRANSDUCTEUR-30V CONVERDITORE-30V	19310 - 528.00	Anzeige-Platte INDICATOR-BOARD PLAQUE INDICATEURS PIASTRA INDICATORE	19311 - 134.00 ww.19311 - 203.00
AM-Variometer AM-VARIOMETER VARIOMETRE - AM VARIOMETRO - AM	19415 - 008.00	5V-Wandler 5V-TRANSFORMER TRANSDUCTEUR-5V CONVERDITORE-5V	19311 - 196.00
KW-Tuner SW-TUNER TUNER-OC TUNER-OC	19415 - 009.00	NF-Teil AF-UNIT PARTIE-FA PARTE-BF	19310 - 469.00
Tuner-Platte TUNER-BOARD PLAQUE-TUNER PIASTRA-TUNER	19311 - 168.00	Netzteil-Platte POWER-SUPPLY BOARD PLAQUE D'ALIMENTATION PIASTRA DI ALIMENTAZIONE	19310 - 474.00
AM-ZF-Platte AM-IF-BOARD PLAQUE-AM-FI PIASTRA-AM-FI	19311 - 206.00	Schalterplatte SWITCH BOARD PLAQUE DE COMMUTATION PIASTRA DI COMMUTATORE	19310 - 480.00
SSB-Platte SSB-BOARD PLAQUE-SSB PIASTRA-SSB	19311 - 174.00	Quarz-Uhr QUARTZ-CLOCK HORLOGE A QUARTZ OROLOGIO QUARZO	15038 - 250.51

+ Elko
+T Tantal-Elko
S Styroflex-Kond.
F Folien-Kond.
K Keramik-Kond.
G Glimmer-Kond.

0207 DIN
0411 DIN
0204 DIN
nicht entflammbar
NON INFLAMMABLE
NON INFLAMMABILE

gedruckter Kondensator
PRINTED CAPACITOR
CONDENSATEUR IMPRIME
CONDENSATORE STAMPATO

GRUNDIG

Satellit 3400 professional

(15038-906.01)

Ersatzteilliste (Auszug)

Gehäuse, schwarz

1	15038-008.01		Gehäuse-Vorderteil kpl.
1.1	15038-014.01		Zierblech kpl.
1.12	09663-902.01		GRUNDIG-Emblem
1.2	15038-177.01		Skala-Abdeckung kpl.
1.3	15038-179.01		Skala-Abdeckung kpl.
1.4	15038-181.01		Skala-Abdeckung kpl.
1.5	15035-183.01		Anzeige-Abdeckung
3	15035-032.01		Griffschale
4	15035-033.01		Kappe, rechts
5	15035-034.01		Kappe, links
6	01475-142.00	2x	Griffbremse
7	09619-625.00	2x	Ringfeder
8	09661-266.01		Tragegriff
9	15038-028.01	6x	Tastenknopf
10	15038-030.01	8x	Tastenknopf
11	15038-026.01		Gehäuse-Rückteil
12	15035-036.01		Kabelfachdeckel
13	15038-037.01		Batteriekastendeckel
15	15038-035.01		Schalthebel kpl.
16	15035-228.01	5x	Schalthebel kpl.
17	15038-036.01	2x	Schalthebel kpl.
18	15035-228.02		Schalthebel kpl.
19	09670-906.01		Knebelknopf
20	09603-566.00		Klemmring
21	09670-855.02	3x	Drehknopf
22	09670-856.05	5x	Drehknopf
23	09670-856.06		Drehknopf
24	15038-039.01		Trimmerknopf
25	09619-767.00	9x	Ringfeder
27	09661-342.01	4x	Zierring
28	15038-083.01		Skala kpl. (49 M)
29	15038-085.01		Skala kpl. (41 M)
30	15038-087.01		Skala kpl. (31 M)
31	15038-089.01		Skala kpl. (25 M)
32	15038-091.01		Skala kpl. (19 M)
33	15038-093.01		Skala kpl. (16 M)
34	15038-095.01		Skala kpl. (13 M)
35	15038-097.01		Skala kpl. (11 M)
36	15038-075.01		Skala kpl. (AM)
37	15038-077.01		Skala kpl. (FM)
38	15035-101.00		Blende
39	15035-102.00		Blende
40	15015-162.00	8x	Skalenhalter

Chassisteile

50	15035-039.00		Montagerahmen kpl.
51	09618-083.97	4x	Kontaktfeder
52	09618-103.00	2x	Kontaktfeder
53	05113-223.00		Kontaktfeder
54	09612-309.02	6x	Seilrolle
55	09612-316.00	2x	Seilrolle
61	19703-036.00		Abstimmwiderstand
62	8138-007-021	2x	Antriebsschnur TE 50 P (schwarz)
64	15035-070.02		Zeiger kpl. (FM)
65	15035-049.00		Antriebsrad
66	09619-767.00		Ringfeder
67	15035-067.02		Zeiger kpl. (AM)
71	09004-002.01		Netztrafo
75	19076-001.01		LAUTSPRECHER
76	09621-119.02		Schaltbuchse mit Mutter
77	15015-080.01		TELESKOPANTENNE KPL.
80	09690-352.97		Netzkabel m. Stecker u. Zentralgerätesteckdose
80	09690-376.97		Netzkabel m. Stecker u. Zentralgerätesteckdose
82	8316-453-002	3x	Zwerglampe 7V 80 MA 2307
83	15035-047.00	2x	FERRITSTABKLEMME

AM-Variometer

102	07422-940.00		Schieber
110	19701-027.08		Drehkondensator kpl.

FM-Teil

120	19420-010.00		FM-Teil kpl.
139	09622-469.00		Koaxialstecker
152	19799-311.91		Trimmer 2,5/6 pf
153	19799-313.91		Trimmer 3,5/13 pf
154	19799-314.91		Trimmer 4,5/20 pf
155	8790-209-002		Einstellregler 2,5 KΩ
156	8790-209-008		Einstellregler 50 KΩ

Spulensatz

170	19400-041.03		Drucktastenaggregat
171	19400-043.03		Tipptaste
172	19400-044.03		Tipptaste
173	19400-050.03		Tipptaste
194	09622-469.00		Koaxialstecker
203	19799-323.91		Trimmer 3/15 pf
204	19799-324.91		Trimmer 4/20 pf
205	19799-325.91		Trimmer 10/40 pf
206	19799-326.91		Trimmer 10/60 pf
207	8790-009-047		Einstellregler 5 KΩ
208	8790-009-152		Einstellregler 10 KΩ
209	19310-528.00		30V-WANDLER KPL.
209.1	8140-525-118		Ferritdrossel 5,6µH 5%
209.3	8305-302-720		Integr. Schaltung TCA 720
209.4	8790-209-005		Einstellregler 10 KΩ
211	19311-153.00		BUCHSENPLATTE KPL.
211.2	19703-024.97		Abstimmregler
211.5	8316-216-001		Glimmlampe Nr. 76.120

KW-Tuner

229	19415-009.00		KW-Tuner kpl.
230	15035-144.00		Spulentrommel
231	15035-148.00		Raststück
232	15035-272.00		Lagerbuchse
234	15035-140.00	2x	Rolle
235	15035-149.00	2x	Rasthebel
237	09603-701.00	4x	Seilrollenachse
239	15035-147.00		Lager
240	15035-133.00		Antriebswelle
241	8138-003-005		Polyamidschnur 0,3ø
241a	15035-270.00		Feder
243	19701-026.97		Drehkondensator
244	15035-142.00		Abweiser
245	15035-050.00		Antriebsrad
246	09603-566.00		Klemmring
247	09612-309.02	4x	Seilrolle
249	8138-007-021		Antriebsschnur (TE 50 P/0,5ø/schwarz)
250	09619-113.00		Zugfeder
251	15035-073.02		ZEIGER KPL. (SW)
252	15015-154.00		Hebel
253	15015-143.00		Hebelfeder
258	19311-168.00		TUNER-PLATTE KPL.
258.2	19706-031.00		Schiebeschalter
258.12	09622-469.00		Koaxialstecker
258.20	19799-321.91		Trimmer 2/6pf
258.21	19799-301.13		Trimmer 1,4/5,5pf
260	19415-121.00		Spulensatz KW 3 (49 m)
261	19415-122.00		Spulensatz KW 4 (41 m)
262	19415-123.00		Spulensatz KW 5 (31 m)
263	19415-124.00		Spulensatz KW 6 (25 m)
264	19415-125.00		Spulensatz KW 7 (19 m)
265	19415-126.00		Spulensatz KW 8 (16 m)
266	19415-127.00		Spulensatz KW 9 (13 m)
267	19415-128.00		Spulensatz KW 10 (11m)

AM-ZF-Platte

281	19706-019.00		Tippschalter
282	19706-020.00		Kippschalter
283	19706-021.00		Kippschalter
284	15038-041.00		Trimmerlager
289	39705-056.00		ANZEIGEINSTRUMENT
294a	8602-099-001		Keramik-Schwinger
297	8316-113-102	2x	Lampe 6/7 V 30MA 2306
304	19701-028.00		Trimmer-Kondensator 100 pf
305	8790-009-021		Einstellregler 25 KΩ
306	8790-009-027		Einstellregler 500 KΩ
307	8790-009-024		Einstellregler 100 KΩ

SSB-Platte

310	19311-174.00		SSB-Platte kpl.
311	19706-020.00	2x	Kippschalter
312	19703-038.97		Drehschalter
324	19799-323.04		Trimmer 3/15pf
325	8790-009-017		Einstellregler 5KΩ
326	19703-037.97		Drehwiderstand 10 KΩ
327	19799-321.91		Trimmer 2/6 pf

Variometer

328	15035-172.00		Variometer-Gehäuse
330	15035-173.00		Welle
332	15035-174.00		Zahnstange

NF-Teil

350	15035-116.00		Distanzstück
372	8446-797-109		Elko 4700µF 25V
373	8410-810-005		Elko 1000 µF 10V
374	8410-820-020		Elko 1000 µF 16 V
375	8713-065-035		Metallschichtwiderstand 0309/0,82Ω/10% NK 3
376	8713-080-057		Metallschichtwiderstand N3/6,8Ω/10%
377	8790-209-001		Einstellregler 1KΩ
378	8790-290-038		Einstellregler 2 KΩ
379	8790-209-009		Einstellregler 100KΩ
380	19703-029.97		Drehwiderstand 100KΩ
381	19703-030.97		Drehwiderstand 1MΩ
382	19703-031.97		Drehwiderstand 100KΩ

Schalterplatte

390	19310-480.00		Schalterplatte kpl.
391	19706-019.00		Tippschalter
392	19706-020.00		Kippschalter
393	19706-025.00		Kippschalter
394	19706-026.00		Kippschalter

Netzteilplatte

401	15035-164.00		Spannungsumschalter kpl.
402	09623-084.00		Lautsprecher-Steckdose
405	8308-528-004		Gleichrichter B 40 C 1500/1000

Verstärkerplatte

420	15035-155.00		Koaxial-Buchse 3-fach
428	8305-190-112		Integr. Schaltung SN 74 S 112 NS 1
429	8305-199-093		Integr. Schaltung SN 74 LS 93N
430	8305-200-598		Integr. Schaltung SN 75498N
431	8309-505-044		Thyristor TIC 44

Anzeigeplatte

440	19311-134.00		Anzeigeplatte kpl.
441	8309-909-941	5x	LED-Displays HA 1141R

5 V-Wandler

445	19311-196.00		5 V-Wandler kpl.
456	8305-301-761		Integr. Schaltung TAA 761 A
457	8790-209-048		Einstellregler 5KΩ

MOS-IC-Platte

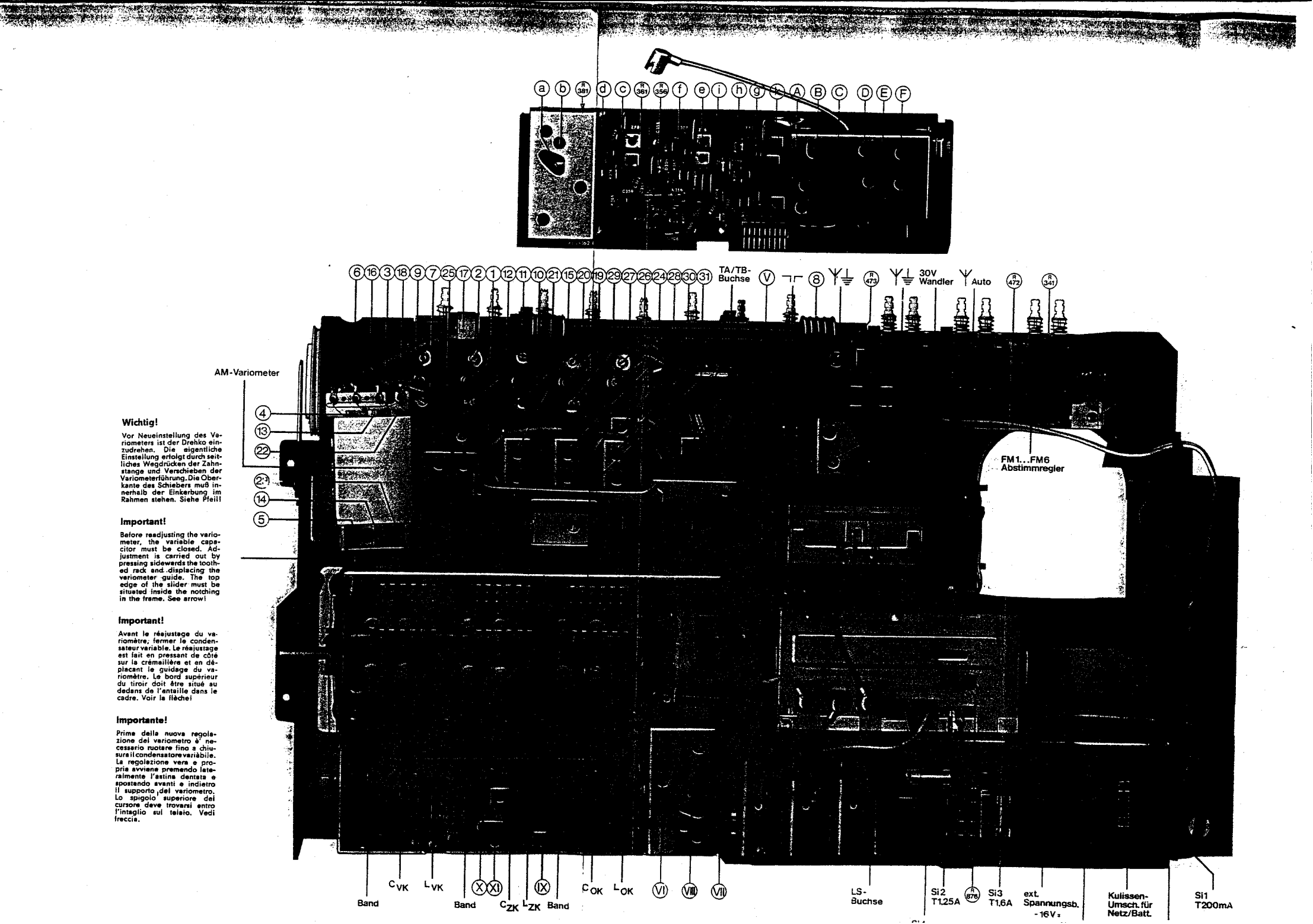
470	19311-179.00		IC-Platte kpl.
471	8305-307-578		Integr. Schaltung TMS 3878 NS

Oszillatorplatte

480	19311-139.00		Oszillatorplatte kpl.
482	8382-241-197		Quarz
483	8305-199-093		Integr. Schaltung SN 74 LS 93N
484	8305-199-000		Integr. Schaltung SN 74 LS 00N
485	19799-336.94		Trimmer 10/60 pf

Quarz-Uhr

490	15038-250.51		QUARZ-UHR KPL.
490.11	15038-106.00		Fenster
490.3	15038-112.00		Deckel
490.6	8154-005-021	2x	Rundzelle 11,6ø x 5,4 SR 44
490.7	15038-122.01	2x	Taste



Wichtig!

Vor Neueinstellung des Variometers ist der Drehko einzudrehen. Die eigentliche Einstellung erfolgt durch seitliches Wegdrücken der Zahnstange und Verschieben der Variometerführung. Die Oberkante des Schiebers muß innerhalb der Einkerbung im Rahmen stehen. Siehe Pfeil!

Important!

Before readjusting the variometer, the variable capacitor must be closed. Adjustment is carried out by pressing sidewards the toothed rack and displacing the variometer guide. The top edge of the slider must be situated inside the notching in the frame. See arrow!

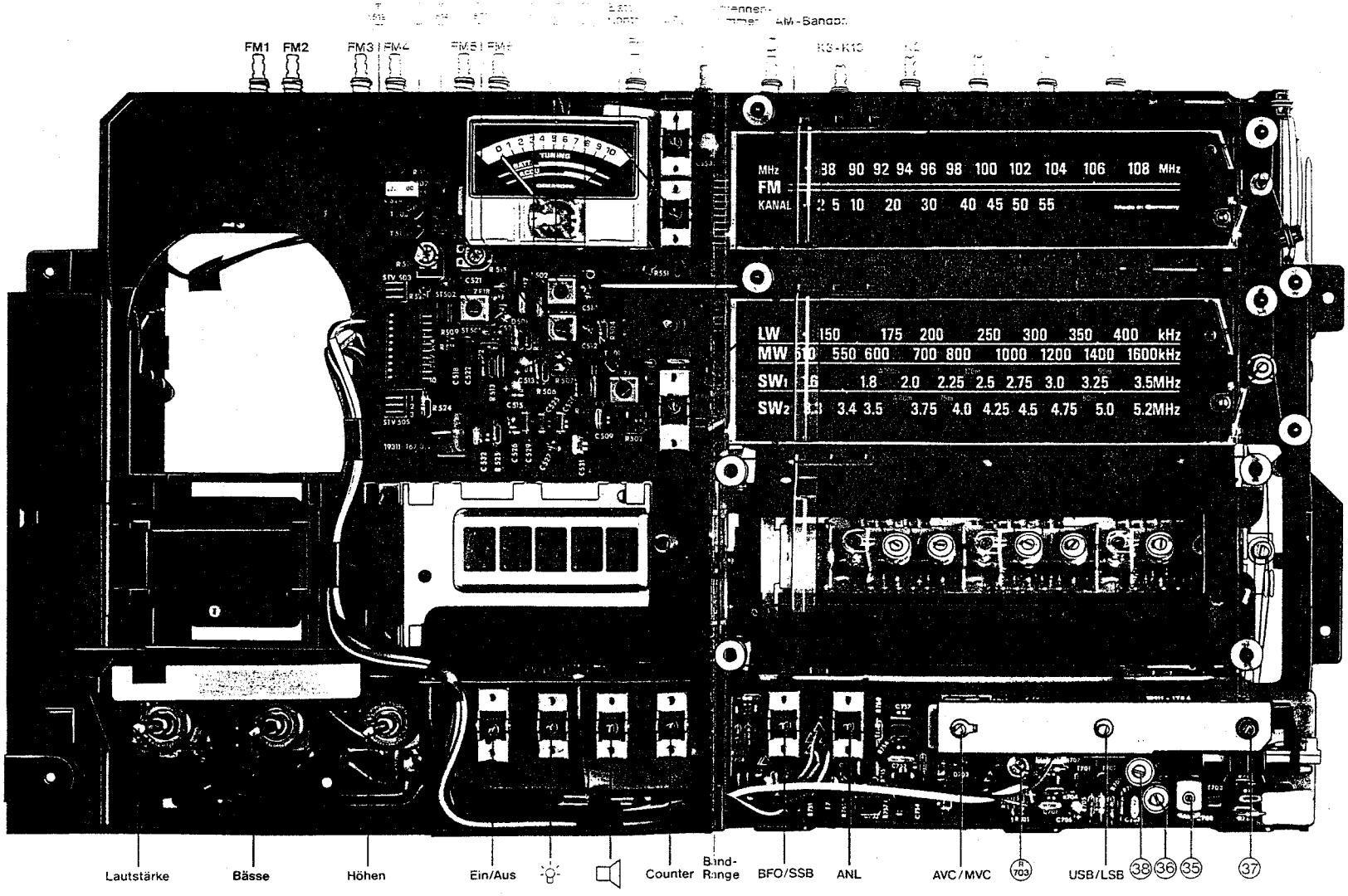
Important!

Avant le réajustage du variomètre, fermer le condensateur variable. Le réajustage est fait en pressant de côté sur la crémaillère et en déplacant le guidage du variomètre. Le bord supérieur du tiroir doit être situé au dedans de l'entaille dans le cadre. Voir la flèche!

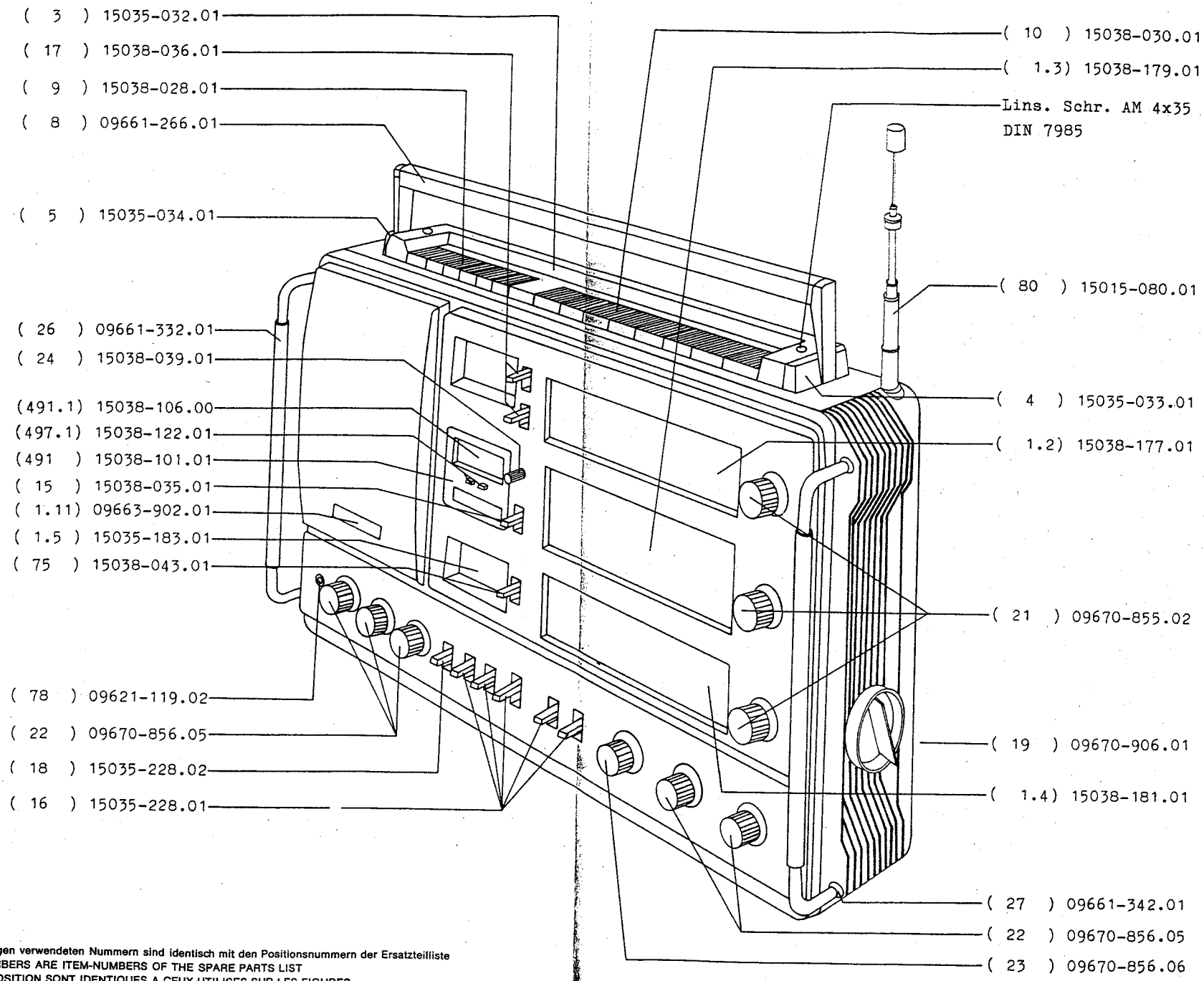
Importante!

Prima della nuova regolazione del variometro è necessario ruotare fino a chiusura il condensatore variabile. La regolazione vera e propria avviene premendo lateralmente l'astina dentata e spostando avanti e indietro il supporto del variometro. Lo spigolo superiore del cursore deve trovarsi entro l'intaglio sul telaio. Vedi freccia.

Abgleich-Lageplan
ALIGNMENT SCHEME
PLAN DE REGLAGE
PIANO DI TARATURA

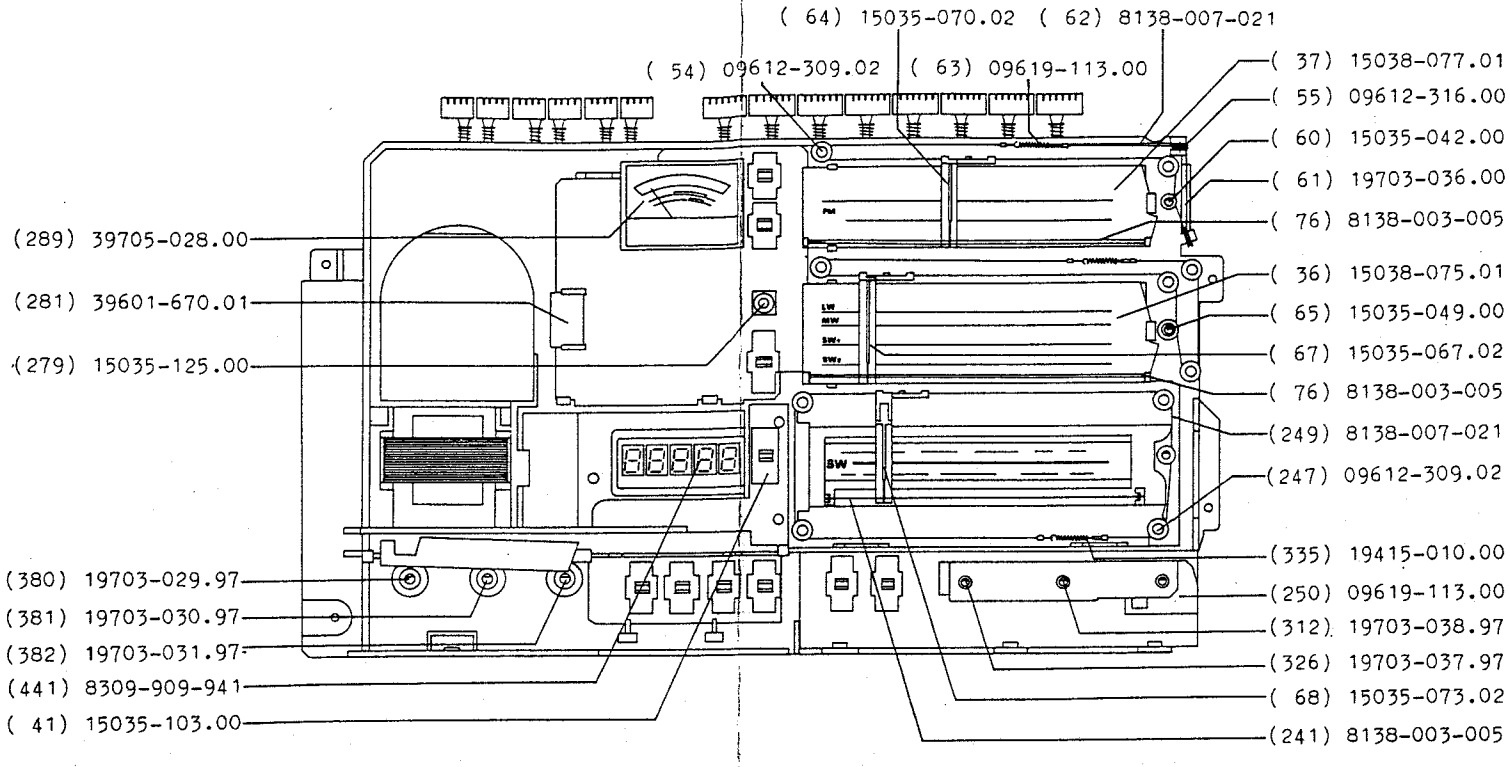


1

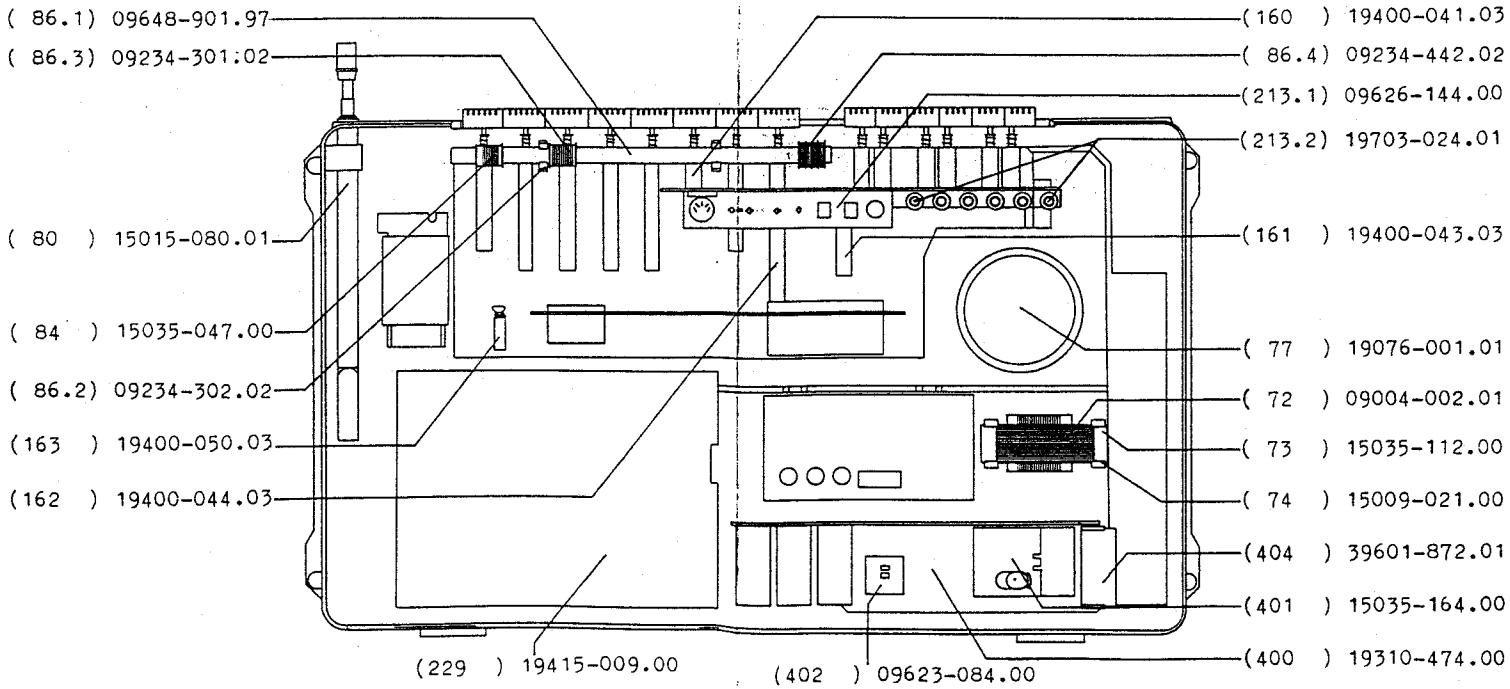


Die bei den Abbildungen verwendeten Nummern sind identisch mit den Positionsnummern der Ersatzteilliste
THE INDICATED NUMBERS ARE ITEM-NUMBERS OF THE SPARE PARTS LIST
LES NUMEROS DE POSITION SONT IDENTIQUES A CEUX UTILISES SUR LES FIGURES
I NUMERI INDICATI NELLE ILLUSTRAZIONI CORRISPONDONO AI NUMERI DI POSIZIONE NELLA LISTA RICAMBI

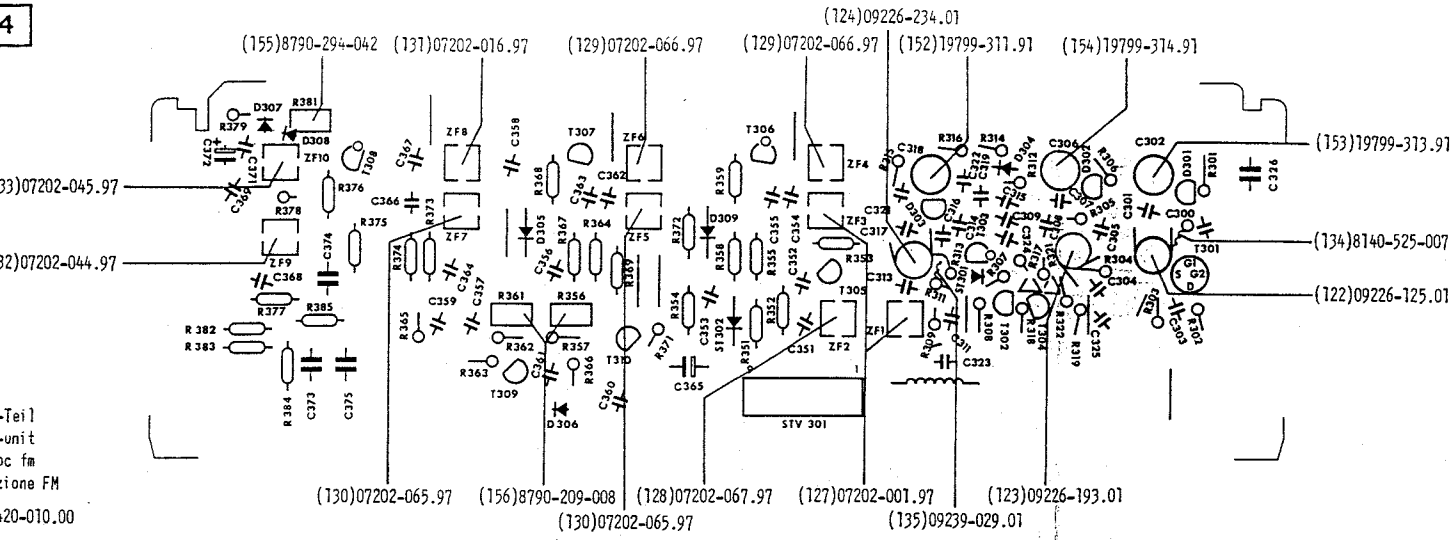
2


(64) 15035-070.02
(62) 8138-007-021
(54) 09612-309.02
(63) 09619-113.00
(37) 15038-077.01
(55) 09612-316.00
(60) 15035-042.00
(61) 19703-036.00
(76) 8138-003-005
(289) 39705-028.00
(281) 39601-670.01
(279) 15035-125.00
(36) 15038-075.01
(65) 15035-049.00
(67) 15035-067.02
(76) 8138-003-005
(249) 8138-007-021
(247) 09612-309.02
(335) 19415-010.00
(380) 19703-029.97
(381) 19703-030.97
(382) 19703-031.97
(441) 8309-909-941
(41) 15035-103.00
(250) 09619-113.00
(312) 19703-038.97
(326) 19703-037.97
(68) 15035-073.02
(241) 8138-003-005

3

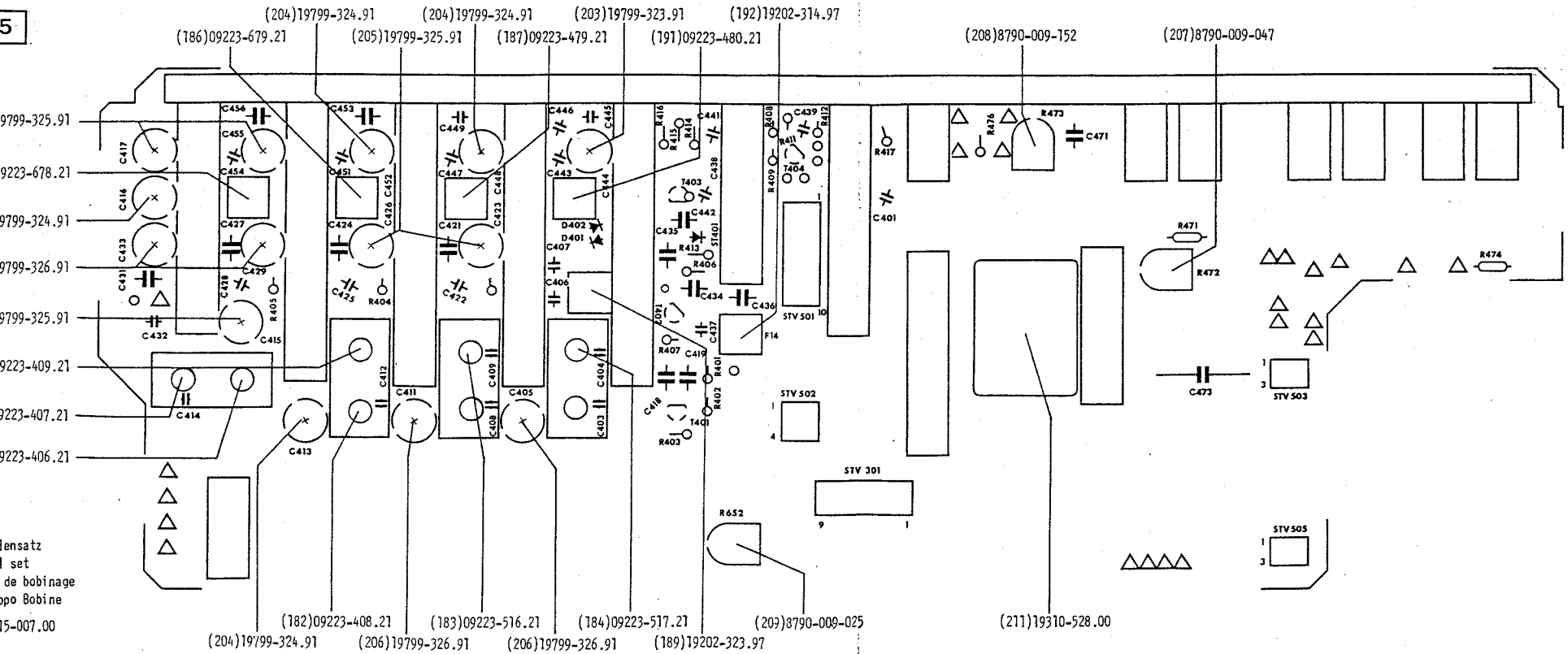

(86.1) 09648-901.97
(86.3) 09234-301.02
(160) 19400-041.03
(86.4) 09234-442.02
(213.1) 09626-144.00
(213.2) 19703-024.01
(80) 15015-080.01
(161) 19400-043.03
(84) 15035-047.00
(77) 19076-001.01
(86.2) 09234-302.02
(72) 09004-002.01
(163) 19400-050.03
(73) 15035-112.00
(162) 19400-044.03
(74) 15009-021.00
(404) 39601-872.01
(401) 15035-164.00
(229) 19415-009.00
(402) 09623-084.00
(400) 19310-474.00

4



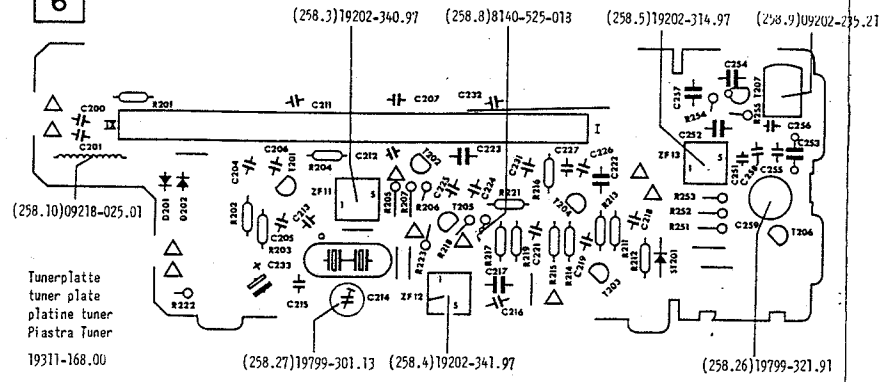
-Teil
-unit
oc fm
zione FM
420-010.00

5



densatz
l set
de bobinage
ppo Bobine
15-007.00

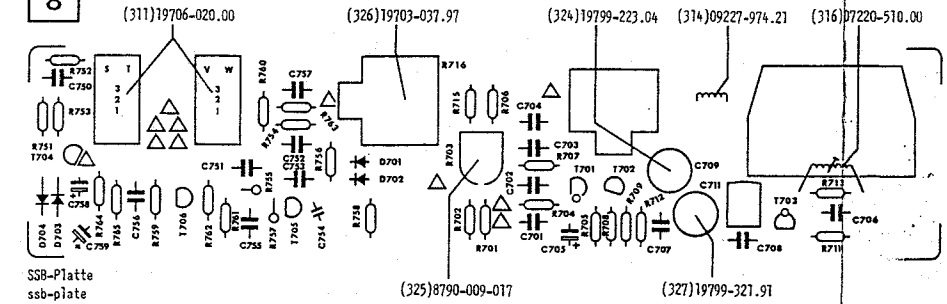
6



Tunerplatte
tuner plate
platine tuner
Piastra Tuner

19311-168.00

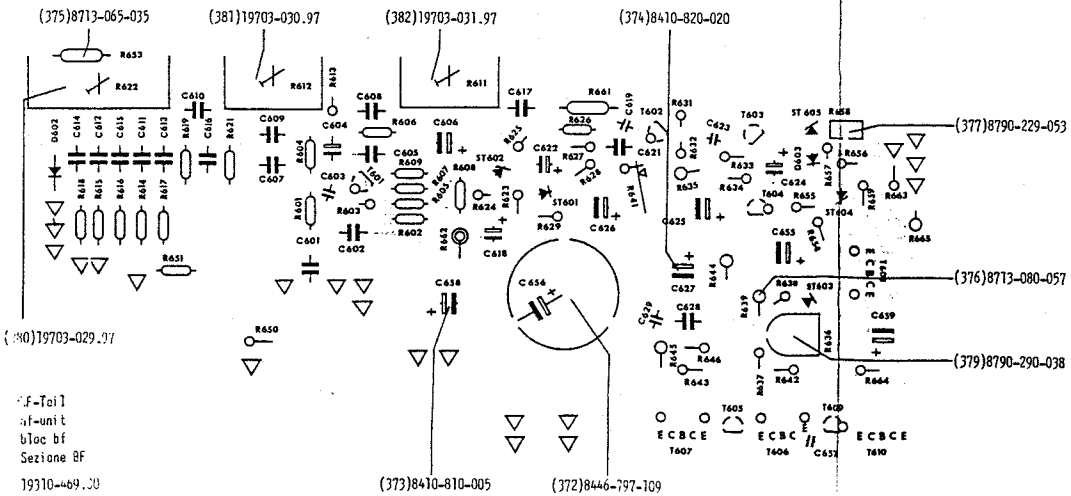
8



SSB-Platte
ssb-plate
platine ssb
Piastra SSB

19311-174.00

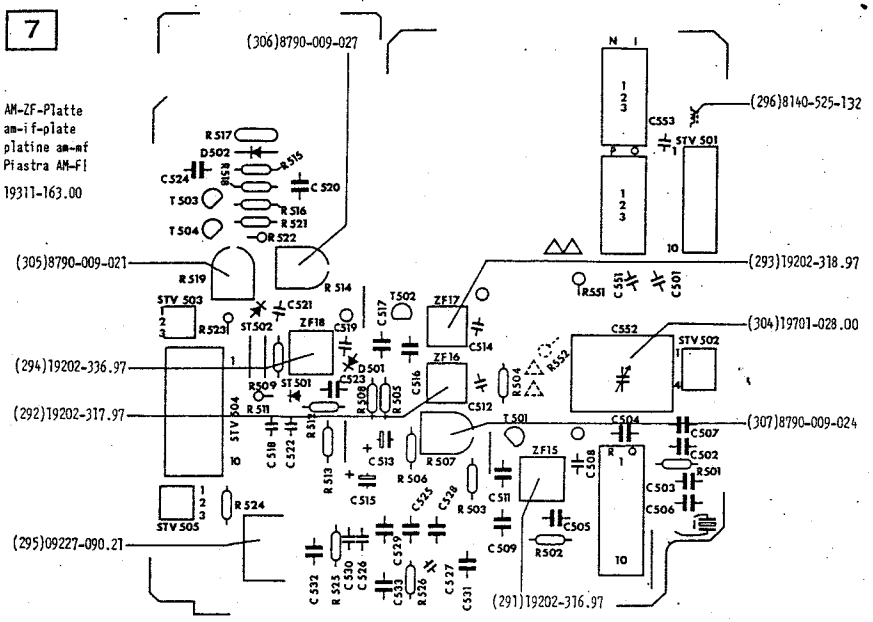
9



HF-Teil
hf-unit
bloc hf
Sezione RF

19310-469.00

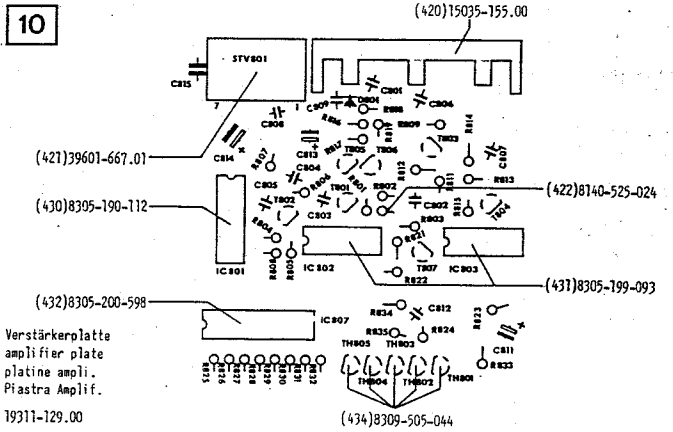
7



AM-ZF-Platte
am-if-plate
platine am-mf
Piastra AM-FI

19311-163.00

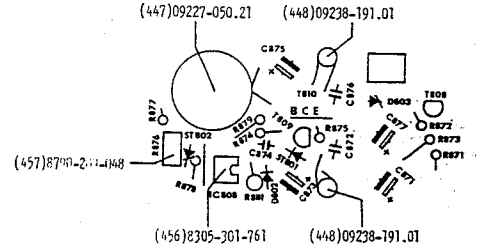
10



Verstärkerplatte
amplifier plate
platine ampli.
Piastra Amplif.

19311-129.00

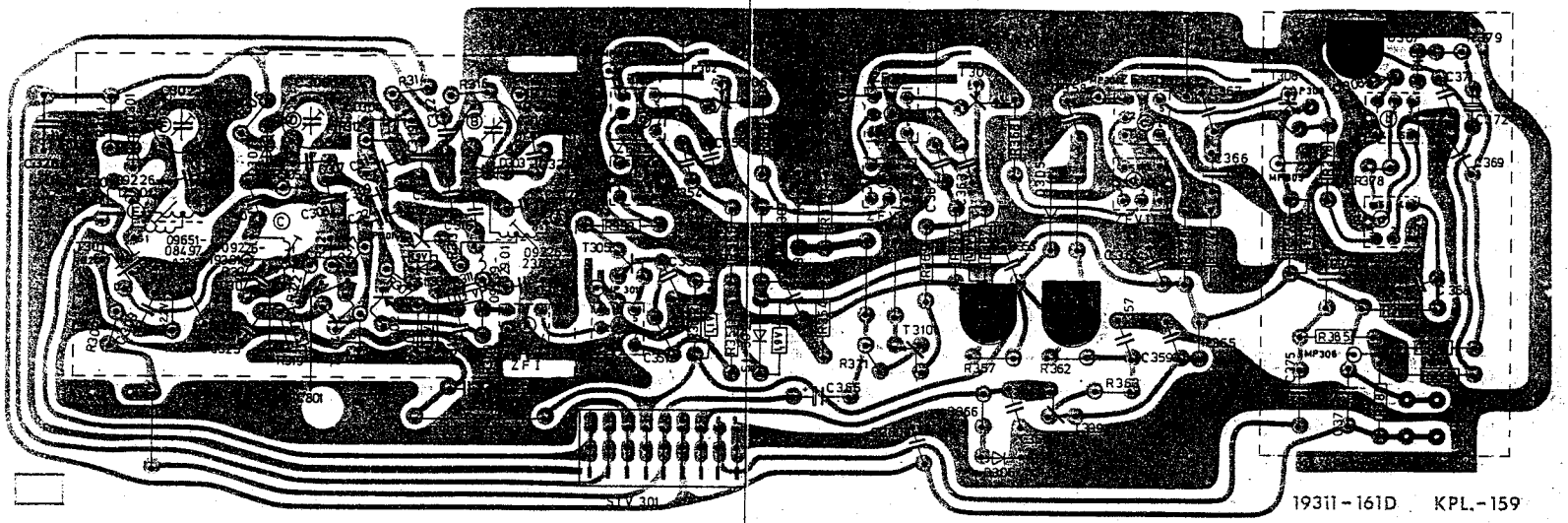
11



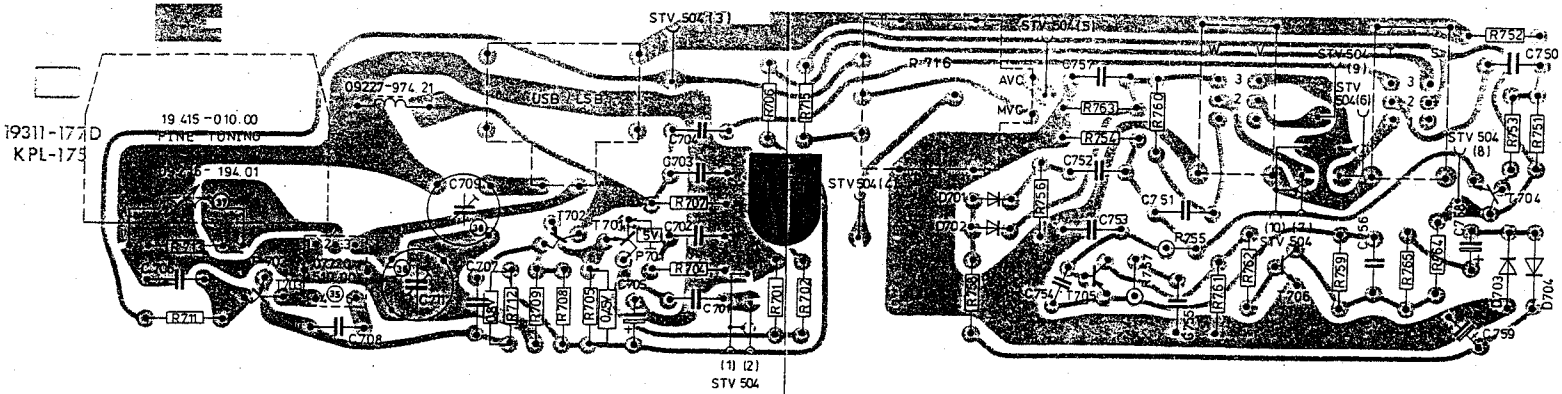
5V-Wandler
5v-transformer
declenchment 5v
Trasformatore 5V

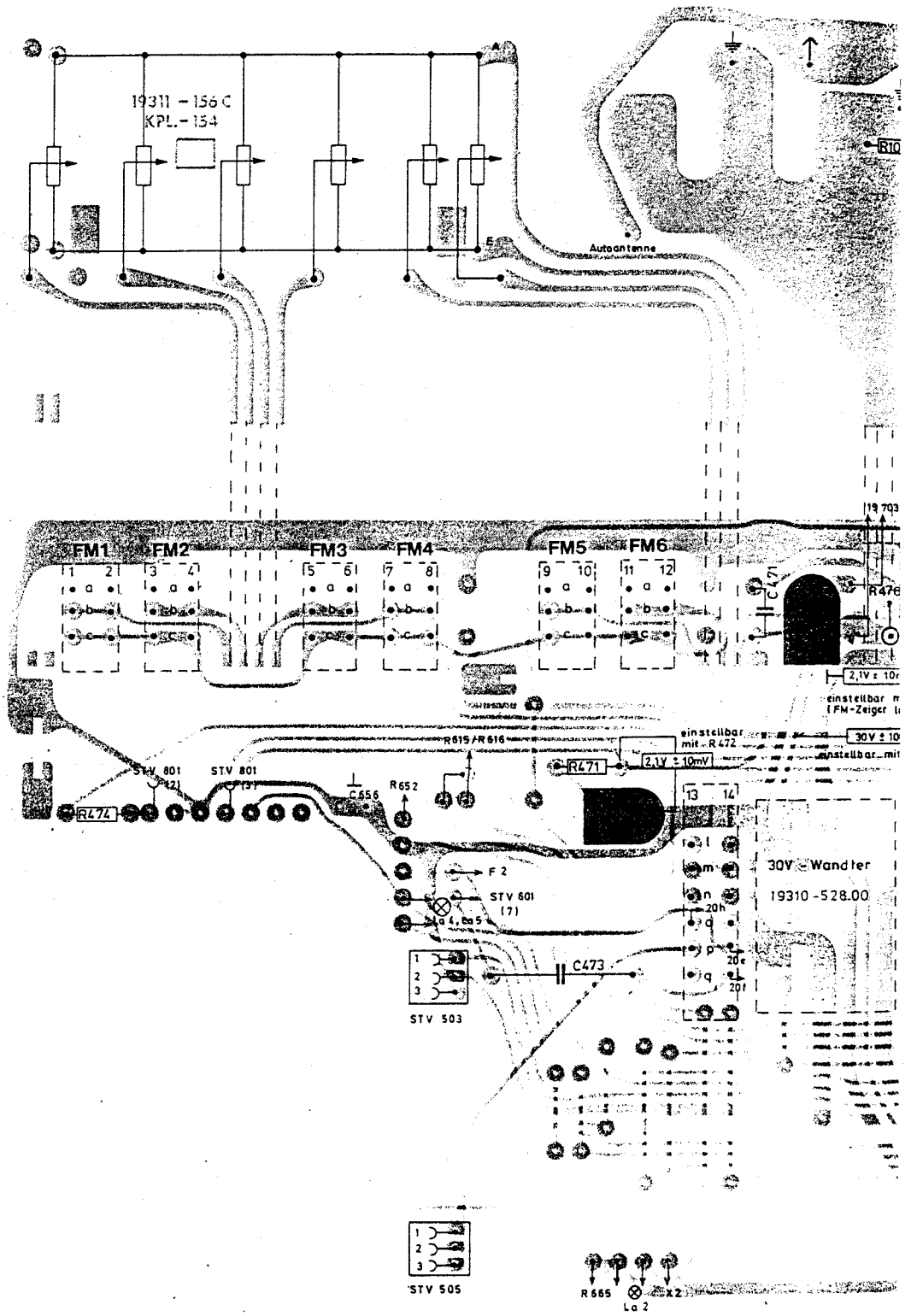
19311-196.00

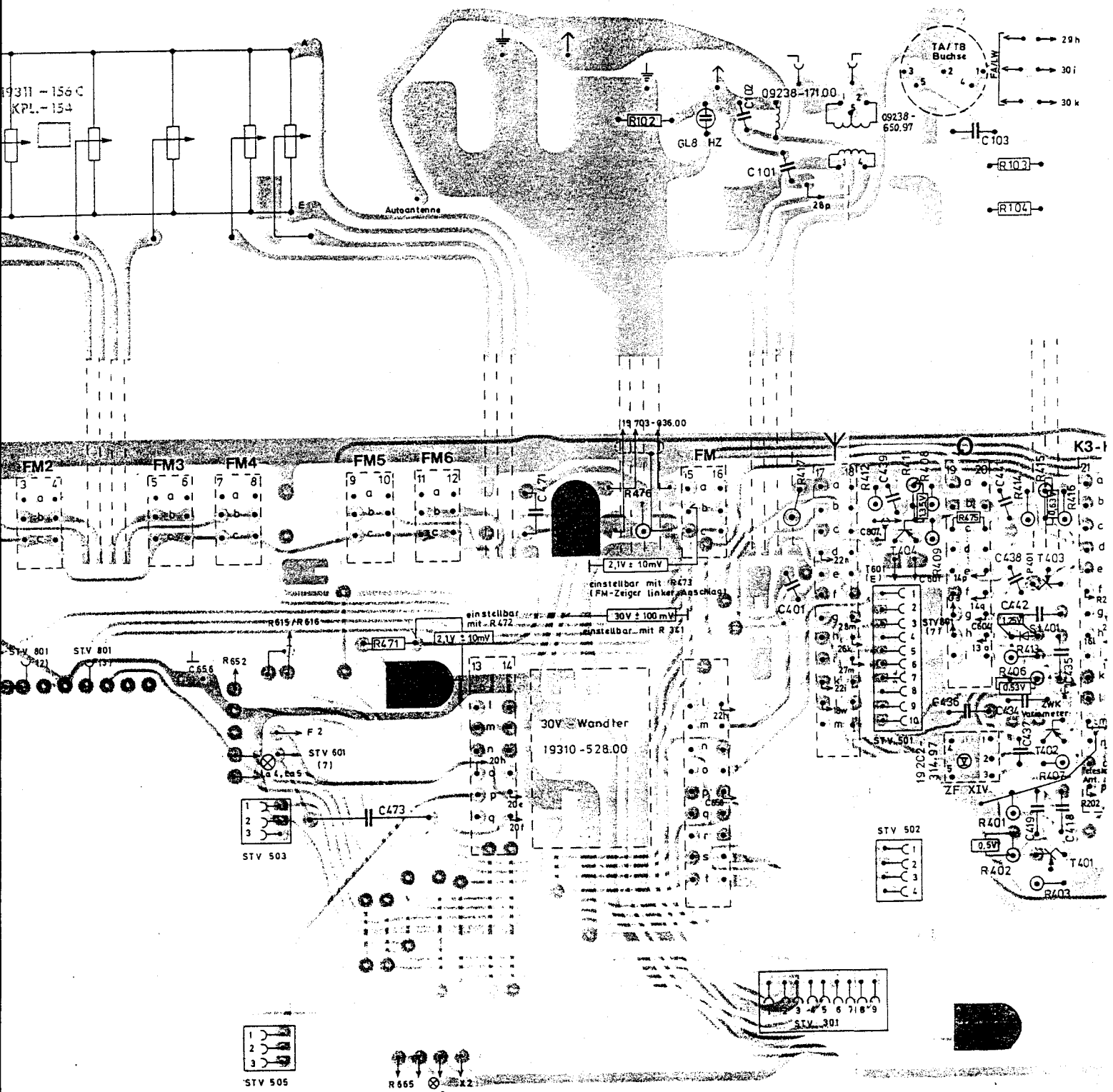
19420-010.00
FM-Teil, Lötseite
FM-UNIT, SOLDER SIDE
PARTIE-FM, COTE SOUDURES
PARTE-FM, LATO SALDATURE



19311-174.00
SSB-Platte, Lötseite
SSB-BOARD, SOLDER SIDE
PLAQUE-SSB, COTE SOUDURES
PIASTRA-SSB, LATO SALDATURE



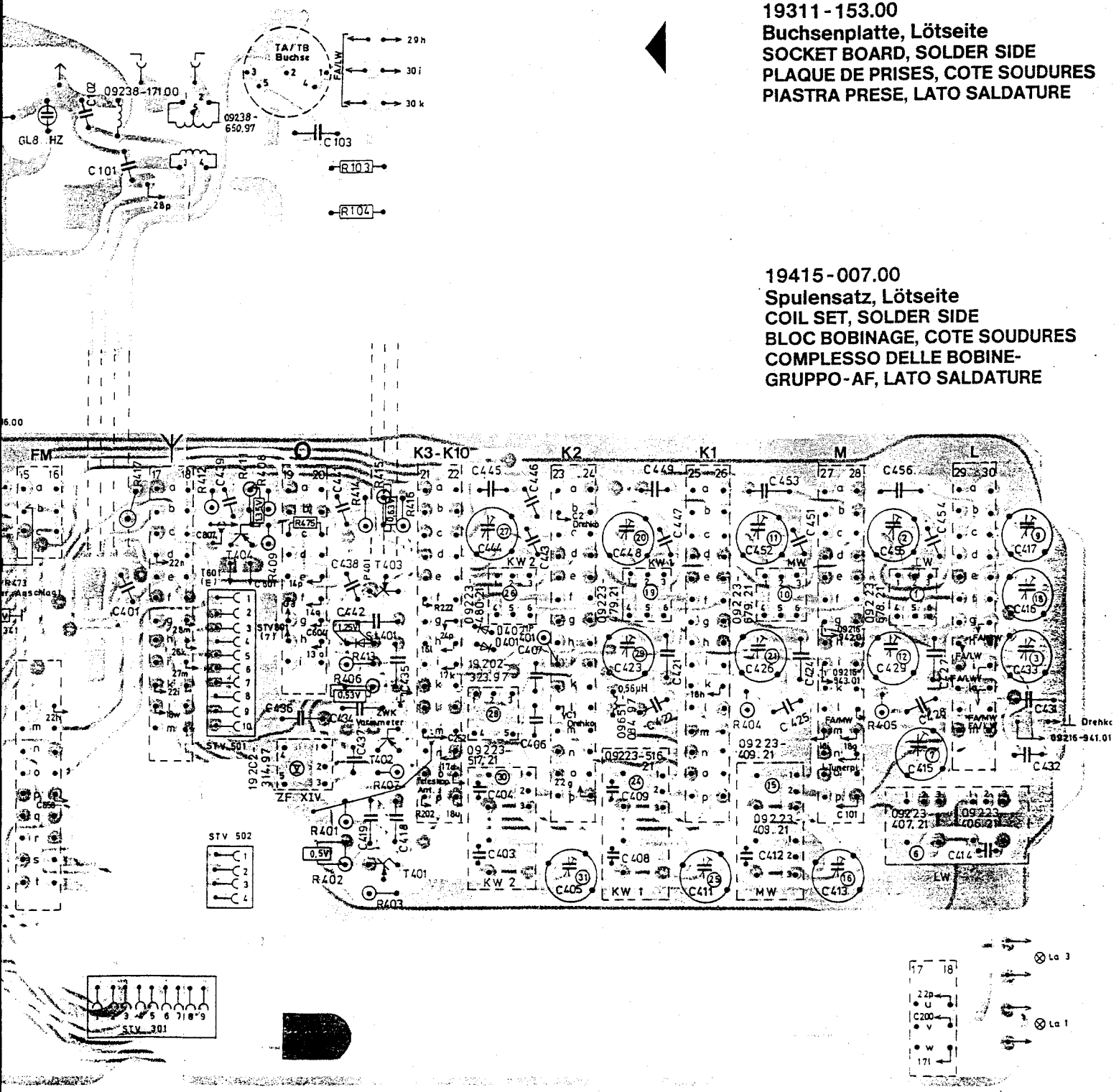

19311 - 156 C
KPL. - 154
Autoantenne
FM1
FM2
FM3
FM4
FM5
FM6
R474
R615 / R616
R471
einstellbar mit - R 472
2,1V ± 10mV
30V ± 10
STV 801
STV 801
C656
R652
F 2
STV 601
(7)
C473
STV 503
STV 505
30V - Wandler
19310 - 528.00
R665
La 2



Best
COM
VUE
LATC

19311-153.00
Buchsenplatte, Lötseite
SOCKET BOARD, SOLDER SIDE
PLAQUE DE PRISES, COTE SOUDURES
PIASTRA PRESE, LATO SALDATURE

19415-007.00
Spulensatz, Lötseite
COIL SET, SOLDER SIDE
BLOC BOBINAGE, COTE SOUDURES
COMPLESSO DELLE BOBINE-
GRUPPO-AF, LATO SALDATURE



Bestückungsseite
COMPONENT SIDE
VUE DU COTE DES COMPOSANTS
LATO COMPONENTI

Lötseite
SOLDER SIDE
COTE DES SOUDURES
LATO SALDATURE